DOCUMENT RESUME

ED 332 897 SO 021 209

AUTHOR	May, Wanda T.
TITLE	Music Experts' Views of an Ideal Curriculum. Elementary Subjects Center Series No. 28.
INSTITUTION	Center for the Learning and Teaching of Elementary Subjects, East Lansing, MI.
SPONS AGENCY	Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE	Dec 90
CONTRACT	G0098C0226
NOTE	115p.
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC05 Plus Postage.
DESCRIPTORS	Comparative Analysis; Curriculum Development; *Curriculum Evaluation; Curriculum Research; Elementary Education; Higher Education; *Music Education; *Music Teachers; *Student Educational Objectives; Student Evaluation; *Teacher Education; *Teaching Methods

ABSTRACT

This report summarizes and compares the views of six experts in music education concerned with teaching music for students' conceptual understanding at the elementary level. Three music professors and three public school music teachers teaching at the elementary level engaged in comprehensive written exercises and extensive interviews with researchers to address issues related to curriculum, teaching, and evaluation in music education. In this report, experts examined the above issues from the perspective of the "ideal," that is, what curriculum, teaching, and learning ought to be in elementary music. They identified, described, critiqued, and discussed features of an ideal curriculum, goals in music education, key concepts and ideas in music, how these are related, and how to organize and sequence these ideas with sample lessons in an effort to develop students' understanding in music. The report presents a comparative and contrastive analysis of the experts' responses on the above dimensions as well as their expressed or implicit views of music as a discipline and what it means to understand music. The findings then are summarized and discussed in light of their implications for music education and teacher education. (Author)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

10.5 50

ED332897

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it
☐ Minor changes have been made to improve reproduction quality
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
WANDA T.
MAY
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Elementary Subjects Center
Series No. 28

MUSIC EXPERTS' VIEWS OF AN IDEAL CURRICULUM

Wanda T. May

Center for the Learning and Teaching of Elementary Subjects

Institute for
Research on Teaching
College of Education
Michigan State University

SO 021 209

MSU is an affirmative action/equal opportunity institution

Elementary Subjects Center
Series No. 28

MUSIC EXPERTS' VIEWS OF AN IDEAL CURRICULUM

Wanda T. May

Published by

The Center for the Learning and Teaching of Elementary Subjects
Institute for Research on Teaching
252 Erickson Hall
Michigan State University
East Lansing, Michigan 48824-1034

December 1990

This work is sponsored in part by the Center for the Learning and Teaching of Elementary Subjects, Institute for Research on Teaching, Michigan State University. The Center for the Learning and Teaching of Elementary Subjects is funded primarily by the Office of Educational Research and Improvement, U.S. Department of Education. The opinions expressed in this publication do not necessarily reflect the position, policy, or endorsement of the Office or Department (Cooperative Agreement No. G0098C0226).

Center for the Learning and Teaching of Elementary Subjects

The **Center for the Learning and Teaching of Elementary Subjects** was awarded to Michigan State University in 1987 after a nationwide competition. Funded by the Office of Educational Research and Improvement, U.S. Department of Education, the Elementary Subjects Center is a major project housed in the Institute for Research on Teaching (IRT). The program focuses on conceptual understanding, higher order thinking, and problem solving in elementary school teaching of mathematics, science, social studies, literature, and the arts. Center researchers are identifying exemplary curriculum, instruction, and evaluation practices in the teaching of these school subjects; studying these practices to build new hypotheses about how the effectiveness of elementary schools can be improved; testing these hypotheses through school-based research; and making specific recommendations for the improvement of school policies, instructional materials, assessment procedures, and teaching practices. Research questions include, What content should be taught when teaching these subjects for understanding and use of knowledge? How do teachers concentrate their teaching to use their limited resources best? and In what ways is good teaching subject matter- specific?

The work is designed to unfold in three phases, beginning with literature review and interview studies designed to elicit and synthesize the points of view of various stakeholders (representatives of the underlying academic disciplines, intellectual leaders and organizations concerned with curriculum and instruction in school subjects, classroom teachers, state- and district-level policymakers) concerning ideal curriculum, instruction, and evaluation practices in these five content areas at the elementary level. Phase II involves interview and observation methods designed to describe current practice, and in particular, best practice as observed in the classrooms of teachers believed to be outstanding. Phase II also involves analysis of curricula (both widely used curriculum series and distinctive curricula developed with special emphasis on conceptual understanding and higher order applications), as another approach to gathering information about current practices. In Phase III, models of ideal practice will be developed, based on what has been learned and synthesized from the first two phases, and will be tested through classroom intervention studies.

The findings of Center research are published by the IRT in the Elementary Subjects Center Series. Information about the Center is included in the IRT Communication Quarterly (a newsletter for practitioners) and in lists and catalogs of IRT publications. For more information, to receive a list or catalog, or to be placed on the IRT mailing list to receive the newsletter, please write to the Editor, Institute for Research on Teaching, 252 Erickson Hall, Michigan State University, East Lansing, Michigan 48824-1034.

Co-directors:	Jere E. Brophy and Penelope L. Peterson
Senior Researchers:	Patricia Cianciolo, Sandra Hollingsworth, Magdalene Lampert, Wanda May, Richard Prawat, Ralph Putnam, Cheryl Rosaen, Kathleen Roth, Suzanne Wilson
Editor:	Sandra Gross
Editorial Assistant:	Brian H. Bode

Abstract

This report summarizes and compares the views of six experts in music education concerned with teaching music for students' conceptual understanding at the elementary level. Three music professors and three public school music teachers teaching at the elementary level engaged in comprehensive written exercises and extensive interviews with Center researchers to address issues related to curriculum, teaching, and evaluation in music education. In this report, experts examined the above issues from the perspective of the "ideal," that is, what curriculum, teaching, and learning ought to be in elementary music. They identified, described, critiqued, and discussed features of an ideal curriculum, goals in music education, key concepts and ideas in music, how these key ideas are related, and how to organize and sequence these ideas with sample lessons in an effort to develop students' understanding in music. The report presents a comparative and contrastive analysis of the experts' responses on the above dimensions as well as their expressed or implicit views of music as a discipline and what it means to understand music. The findings then are summarized and discussed in light of their implications for music education and teacher education.

MUSIC EXPERTS' VIEWS OF AN IDEAL CURRICULUM[1]

Wanda T. May[2]

Doesn't understanding music in elementary school mean singing songs, playing songflutes, and performing in a spring musical? Most music experts think not. We can participate in many of the above school activities called "music" and still not understand or appreciate music. Some of this lack of understanding and appreciation is due to the marginality of the arts in the school curriculum and the cumulative impact of missed opportunities; and some is due to missed opportunities when we did have something called music. On both accounts, curriculum can be viewed as what students have an opportunity to learn and experience. Fortunately, most of the music experts in this study, in their descriptions of thoughtful practice, hold an elaborated view of what the opportunities in music ought to be and can entail.

This report summarizes and compares the views of six experts concerned with teaching music for understanding at the elementary level: three university professors and three music teachers teaching in public schools at the elementary level. These experts engaged in comprehensive written exercises and extensive interviews with Center researchers to address issues related to curriculum, teaching, and evaluation in music education. The experts examined these issues from the perspective of the ideal (that is, what curriculum and teaching ought to look like in elementary music) and from the perspective of curriculum materials (by critiquing a popular music textbook series and surmising what kind of musical understanding was apt to be fostered in the classroom if these materials were used uncritically by teachers). This report only examines experts' views of an ideal curriculum. Their critiques of a commonly used music textbook series are discussed in a separate report (May, in press).

After some background is presented on the procedures used for the selection of experts, data collection, and data analysis, the first section describes university experts' views of an ideal music curriculum. The second section describes the teacher experts' views, while the third provides a comparative summary of all the experts' responses and implications of the findings for music education.

---

[1] A summary of this study's findings was presented at the annual meeting of the Americal Educational Research Association, Boston, April 16-20, 1990.

[2] Wanda T. May, assistant professor of teacher education at Michigan State University, is a senior researcher with the Center for the Learning and Teaching of Elementary Subjects.

This study is part of Phase I of the research agenda of the Center for the Learning and Teaching of Elementary Subjects. Center researchers are engaged in a five-year program of research and development on elementary-level (Grades K-6) teaching and learning in mathematics, science, social studies, literature, and the arts, with particular emphasis on teaching these content areas for understanding and meaningful application. This study of Phase I involved developing and using a common set of framing questions to elicit the views of two expert panels: (a) university professors involved with the scholarship and teacher education dimensions of elementary-level teaching in a school subject and (b) elementary music specialists/teachers with reputations for excellence in teaching the subject and developing students' understanding beyond rote learning, drill, and practice. While this report focuses on the views of experts in music, others focus on expert views in teaching elementary mathematics, science, social studies (Prawat, Brophy, & McMahon, 1990), and literature.[3]

Selection and Recruitment of Music Experts

Two panels of experts were recruited for this study. The first panel consisted of three university-based professors in music education who are nationally recognized, scholarly leaders in the field and are particularly knowledgeable about elementary-level instruction in music. First, we contacted music specialists at Michigan State and other universities by phone and asked them to nominate individuals who were (a) scholarly leaders in the field; (b) familiar with curriculum, teaching, and evaluation practices at the elementary level; and (c) concerned about teaching music with emphasis on developing students' understanding, critical/creative thinking, and problem solving.

---

[3] This comprehensive study conducted across school subjects was coordinated by Richard Prawat, professor of teacher education at Michigan State University and a senior researcher with the Center for the Learning and Teaching of Elementary Subjects.

Next, we shortened the list and prioritized it for desirable interviewees, based in part on the information we received about the degree to which they fit all of the above three criteria and in part on our desire to achieve balance across theoretical perspectives on the nature and purposes of music education. Once consensus was reached on these short lists (including alternates) through discussion among Center researchers, we then called the identified scholars to explain the study and recruit their participation. We were gratified that all of our first choices agreed to participate.

The second panel consisted of three elementary music specialists who have impressed leading music education scholars and state-level leaders as being outstanding at teaching music for understanding and higher order applications. Given the paucity of research on elementary music teaching (in the context of actual practice) by either specialists or regular classroom teachers, we decided it would be best to recruit music specialists for this study who teach only at the elementary level, despite K-12 certification. To identify such teachers, we called scholarly leaders in music education at universities all around the country (including those who were being recruited to participate in the study), described the kinds of teachers we were looking for, and asked for nominations. We also contacted leaders in the Music Educators National Conference for nominations of outstanding teachers.

We then contacted nominated teachers by phone and interviewed them concerning their educational backgrounds, teaching experience, and ideas about goals and methods for teaching music. Notes from the telephone interviews were used as the basis for discussion and selection of teachers. A short list of nominations was developed from these data, and teachers were prioritized on the basis of reflecting diverse, but representative approaches to teaching music for understanding. We then called the teachers to ask them to participate in the study.

Data Collection

Data were developed from two sources. Part I was a detailed, written document in which the experts (both panels) responded to a common set of questions about ideal curricula. (See Appendix for directions to the participants and the set of questions for Part I.) Curriculum was defined broadly in this exercise as what students have an opportunity to learn. In other words, content knowledge, skills, and dispositions were addressed as well as a program's overall goals, key ideas/concepts and understandings among these goals, scope and sequence, texts and other materials, instructional methods, and evaluation of students' learning.

Questions in the Part I exercise asked experts to identify key features of ideal music curricula and then to apply these ideas by indicating how they would organize instruction related to each of the three broad goals in music education presented to the experts (or additional goals generated by the experts). These goals were derived by analyzing literature and position statements in art/music education and examining state and district-level curriculum documents and commercial materials produced for elementary music.

The three goals presented to the experts addressed the study of musical elements (i.e., pitch, rhythm, symbols, and the "language" of music often mentioned in curricular statements); focused on the creative process involving the exploration of the interests, knowledge, and decisions persons often use to create music for listening or performance; and referred to developing positive dispositions toward music and understanding why people create and engage in music as a human activity in sociocultural context.

The experts were asked to identify key understandings related to each of these goals, indicate how these ideas are related, and describe how they would organize the ideas for presentation to students. Then, experts were asked to select one of the key understandings for each goal and indicate how they would teach it at the second- and fifth-grade levels. In these sample lesson plans, experts were to note the information that they would provide students, the nature of teacher-student discourse that would occur, the activities or assignments that would be included, and the methods they might use to evaluate student learning.

Instructions for Part I were sent to the panelists by mail and followed up with phone calls to make sure that they had arrived and to provide any needed elaboration or clarification. The panelists then prepared written responses to Part I and mailed copies to us. One university expert also submitted some of his/her published articles germane to Part I questions. Upon receipt of these responses to Part I, we sent the panelists the instructions to Part II of the study, along with a full set of the curriculum materials to be evaluated for Part II (Silver Burdett & Ginn's World of Music, Morristown, New Jersey: Grades 1-2, Palmer, Reilly, & Scott, 1988; Grades 3-5, Beethoven, Davidson, & Nadon-Gabrion, 1988; Grade 6, Culp, Eisman, and Hoffman, 1988).

Once the panelists completed the curriculum critique for Part II, they were invited to Michigan State for lengthy individual interviews (approximately six hours) conducted by the author and other Center researchers. During these interviews, the panelists elaborated on and responded to questions about their written responses to Parts I and II and then led us through their notes on the textbook series critique, elaborating, showing examples, and answering additional questions as they proceeded. These interviews were audiotaped and transcribed, and all materials written by the panelists were collected and/or photocopied for analysis. One of the professor panelists did not participate in the on-campus interview due to other commitments.

Completion of these interviews ended the panelists' formal involvement with the study, although they were later provided with copies of their interview transcripts for their own use. The panelists were reimbursed for all expenses incurred in coming to Michigan State to be interviewed, and they also received a modest honorarium for their time spent preparing written responses to Part I and notes for Part II of the framing questions. As all panelists and Center researchers discovered, these exercises required more time of the panelists than anticipated. All panelists stated that the exercises in Parts I and II of this study were challenging and thought provoking.

Data Analysis

The panelists' individual written responses were duplicated for multiple analysis and coding, and audiotapes of their interviews were transcribed and duplicated for coding. To protect the panelists' anonymity, the materials were assigned code numbers (P1, P2, and P3 for the professors; T1, T2, and T3 for the teachers), and names, institutional affiliations, and other personal references were removed from the printed data sources. The experts' quotations presented in this report are from the above data sources. Another unsolicited but helpful data source from some panelists was published articles elaborating on some of the topics or questions addressed in Part I and sample detailed unit/lesson plans from their resource files.

The data were analyzed by the author in three stages. First, using the Part I questions as the primary framework, each expert's responses were categorized and coded for emergent themes within each of these sections of information (i.e., "goals"). Themes and patterns within and across these categories (by questions) were analyzed. For example, some panelists tended to respond to the questions directly and matter-of-factly; others elaborated extensively on both the questions and their responses, or digressed with information pertinent to other areas of the exercise. Secondly, after coding the themes of individual experts' responses to each of the areas addressed in the Part I exercise, a comparative analysis was conducted across each panel. For example, the professors' responses were compared and contrasted as a set; the same comparative analysis was then conducted with the teachers' responses as a set.

Finally, the two groups of panelists' responses were compared and contrasted on each of the questions or dimensions of the exercise (i.e., teacher expert responses were compared with those of the professor experts). With such a small sample, however, making sweeping generalizations about differences between teachers and professors is neither warranted nor very helpful. For example, the findings from this study suggest that responses were more alike than different among professors and teachers, while responses varied within each group. This is due, to some extent, to the purposeful selection of panelists identified as "experts" who have a particular interest in teaching for understanding, no matter their role or credential. This also may be due to purposefully selecting representative viewpoints within each group. While all of these experts would argue for the importance of teaching music for understanding, they have different proposals for how this can be accomplished.

University Experts' Views of an Ideal Music Curriculum

All participants were asked if they agreed with the following features of ideal curricula, to elaborate on any disagreements they might have, and to identify any additional features of curricula which they thought were important and ought to be included. The key features were developed by Center researchers from a review and synthesis of the literature on cognition and teaching subject matter for understanding in general (Prawat, 1989) as well as elementary art and music in particular (May, 1989).

1. Balancing breadth with depth by addressing limited content but developing it sufficiently to ensure conceptual understanding
2. Organizing the content around a limited number of powerful ideas (basic understandings and principles rooted in the discipline)
3. Emphasizing the relationships between powerful ideas, both by contrasting along common dimensions and integrating across dimensions, in order to produce knowledge structures that are differentiated yet cohesive
4. Providing students not only with instruction but also with opportunities to actively process information and construct meaning
5. Fostering problem solving and other higher order thinking skills in the context of knowledge application. Thus, the focus is less on thinking processes per se and more on how to make use of previously acquired knowledge in new contexts.

Professors' Responses to the Key Features

P1 agreed with the above statements about features of ideal curricula. P2 generally agreed with the key features but added,

> the organization of musical experiences may not be so neat and often will not be organized according to accepted principles of learning. When great music is used for instruction, many ideas about sequencing have to be modified or discarded; great music was not written to be used as instructional material.

P2 reiterated that "recreative" objectives are as valid in learning to understand music as creative objectives. This expert then discussed the importance of modeling to develop musical understanding because modeling is "thinking" and does not depend upon language. "[I]t is difficult to imitate in music without thinking. The interaction of musical memory and rote work contribute to understanding." P2 cited examples of modeling from piano instruction to self-taught jazz musicianship and Bach's copying the music of Vivaldi to gain insight into music's structure.

P2 also agreed with the need for depth over breadth and "connectedness" but was concerned that higher order thinking need not be verbalized in music to demonstrate understanding music. Verbalization might not be a primary instructional strategy to tap higher order thinking in music or visual arts. "Some of the connectors may be subliminal or related to the psychomotor or perceptual domains." P2 also suggested that there might be too much emphasis on musical elements. Ideal curricula in music "should continually integrate an appropriate balance between pedagogical and artistic materials." This means drill and practice are necessary in music, not only to develop skills but also to facilitate understanding; however, this should be balanced with "great music"--even for the youngest students. Musical materials must be organized "for the most efficient learning," and this organization can take several forms: "simple to complex, concrete to abstract, old to new. . . ." Such an organization is not possible if only artistic or great music is used as instructional material.

P2 stated that ideal curricula should emphasize value judgments, distinguishing these from preferences. "Judgments are conducted on the quality of the art object and on the performers' efforts to recreate that art object." Meaning is derived from "reacting to the musical stimuli, a reaction that is cognitive and affective. Meaning will be different depending upon one's tastes (preferences), the situation, and one's cultural background." P2 concluded this section pointing out that some things "are learned out of context and before there is a felt need." A key feature omitted, according to P2, was motivation for continued learning, stating that this often is ignored at the elementary level.

P3 had no strong objections to the ideal features, per se, particularly with respect to depth over breadth--except for the following:

> It is very hard to tell just how "ideal" a feature is until we see how it is actually implemented by teachers. Also, without knowing how the features would be implemented, it is difficult to know what they really mean. I find this especially to be so with the last four features.

P3 agreed that "breadth of learning, without depth, will never give rise to intense or deep investigation." However, P3 stated there was difficulty determining what was meant by a "powerful idea" in the second and third features. "Such a notion is appropriate to the sciences more than to other areas. Gravity, genetic inheritance, and evolution strike me as inherently powerful ideas and not likely to be overturned any time soon." In disciplines like music, P3 could "not think of correspondingly powerful concepts that would not skirt dangerously close to triviality. Reducing the richness of humanistic disciplines to a handful of powerful ideas strikes me as less than desirable and probably also impossible."

P3 felt that Features 4 and 5 addressed the same thing. "The general principle is that learning comes less from hearing the teacher tell us something than it does from doing and using." However, P3 suggested that "actively processing information" could be viewed as "information processing" in psychology, a view of learning not held by P3. P3 supported Piagetian cognitive developmentalism and wanted his/her theoretical orientation to be clear to Center researchers.

Additional comments made by P3 were as follows: The activities in which children engage should be real. "Real activities, as opposed to pedagogical exercises, have a purpose beyond the provision of 'school work.'" P3 used the analogy of writing:

> When children publish a class newspaper, distribute and enjoy an anthology of their own stories, pass notes, or write letters to the teacher or far-away friends--these are real activities. They have a purpose that rests in the need to communicate with someone, either a general audience or a specific person.

Writing an essay on "What I Did Last Summer" and similar exercises are not real. They are designed first for pedagogical purposes and only secondarily, if at all, from the child's own needs.

There are three types of realness to take into account in music and art, according to P3: real materials, real activities, and real presentations. "Children . . . should have available materials that are real, 'mature,' open to manipulation, and malleable enough to allow expression." Examples of real material in music are "songs and compositions written by bonafide composers or songs and music games that reside in our indigenous folk culture." Examples of "not-real music are scales and many of the songs and compositions that account for the genre called 'school music.'" According to P3, "if a piece is unlikely to be sung ever outside of a school, it is unlikely to be a piece of real music."

Constantly practicing in music is not a "real" activity, according to P3. To sing a song or to play music as a group, practice is necessary, but most elementary classrooms "do nothing but rehearsal. They sing to learn the song, but not to enjoy it. Once a song is learned, they go on to learn and rehearse some new ones." P3 suggested that aesthetic enjoyment should be the real purpose of musical activities. Finally, in terms of real presentation, P3 suggested that art and music typically involve a perceiver or audience. "Few, if any, musicians and artists are willing to create art that is not perceived by someone else. In schools then, one hopes for real presentations and performances that occur more frequently than the occasional school play and choral production." P3 stated that there should be in-class performances of every musical activity. By focusing on "realness" as a key feature of an ideal curriculum, P3 suggested that "most of what children do outside of school--or outside the curriculum--is real," and in-school activities should be made more real.

Comparison of professors' comments about key features. P1 agreed with the key features provided and made no more comments about them. P2 generally agreed with the key features listed, but qualified some of these. Some of P2's comments generalize across subject areas, given the key features presented. For example, P2's complaint that there is probably too much emphasis on elements in music education is much like saying there is too much emphasis on facts in science or social studies. P2 would emphasize value judgments over mere preferences, which would address goals focused on developing critical thinking in any subject.

The features related to the selection and organization of key ideas in music seemed to trouble P2 due to a concern that music presents complex features not easily organized in a logical or linear way because these features occur simultaneously in musical works, particularly "artistic" or "great music" as opposed to pedagogical materials. Pedagogical materials can be organized from simple to complex, concrete to abstract, familiar to new; however, P2 implied that "artistic" material could not be addressed in this manner because it is more complex. P2 then contradicted this concern by stating that musical materials ought to be organized "for the most efficient learning." How complexity can be reduced "efficiently" was not clarified by P2. Other comments specific to music education was P2's assertion that there are nonverbal or nonsemantic ways to demonstrate understanding of music. Otherwise, P2's comments revealed a particular theoretical orientation to teaching/learning processes which seemed to draw heavily from behaviorism. There were many comments that highlighted "recreational" objectives (performance of others' work), modeling, practice, memory, and motivation. P2 also defined "meaning" in a stimulus-response way: Meaning is derived from "reacting to the musical stimuli." P2 dichotomized cognition and affect, although both "reactions" were considered to be important and thought to occur simultaneously.

P3 questioned the meaning of most of the key features, although agreeing with depth over breadth as did P1 and P2. P3 believed one could not determine what is "ideal" about curriculum until it is implemented by teachers. P3 thought it was presumptuous to speak of "powerful ideas" in humanistic disciplines as opposed to the sciences. This led P3 to infer that the theoretical orientation of Center researchers was "information processing" (given P3's analysis of the language used in the key features). P3 wanted to clarify a different orientation to learning: Piagetian cognitive developmentalism.

Like P2, P3 was concerned about "real vs. not-real" materials used in music. P3 extended this discussion, however, with respect to activities and presentation. Thus, P2 and P3 differed in how they defined "real" activities and presentation/performance. For P3, students are as much recipients of other students' efforts and works as they are of "great works." They do not merely "re-create" others' works, as P2 suggested; students can create authentic works in authentic ways. While P3 acknowledged the need for practice as did P2, P3 defined the learning of songs, rehearsal, and practice as "not-real" activities that occur too often in school. "Aesthetic enjoyment should be the real purpose of musical activities."

These differences between P2 and P3 seemed due primarily to their different theoretical orientations to music. (We haven't much of a clue about P1's orientation at this point as P1 agreed with the key features presented, making no qualifications or additions.) Both P2 and P3 acknowledged out-of-school contexts and students' backgrounds and experiences as features which curricula and teachers must account for in some way; however, P3 spoke to this need more than P2 with respect to key features of an ideal curriculum.

Three Goals in Music

The goals presented to expert professors and teachers to address in these exercises were developed or derived by Center researchers analyzing literature in music education and examining curriculum documents produced for K-6 music education by several state departments. The first goal was selected to address the fact that all curriculum documents featured the study of musical elements and concepts and discussed music as a "language" or form of communication in their rationales. The second goal focused on the artistic process should one believe that to understand music one has to know how to create it, or understand the kinds of interests, knowledge, and decisions that persons use to create music or to read, perform, and listen as musicians and literate consumers or audience. The third goal was selected because of its reference to developing positive dispositions toward music and understanding why people create or engage in music as a human activity in social context. All of the curriculum documents studied had goals related to developing understanding of musical concepts and skills, composition or the creative process, developing positive attitudes/dispositions toward music, and the importance of studying the social, cultural, and historical contexts of music. Listed below are the goals presented to the experts:

1. Develop an understanding of how musical elements and symbols (pitch, rhythm) are selected, organized, and presented by composers and musicians to communicate meaning
2. Develop an understanding of the artistic process in composition or performance to create musical forms with expressive intent (choices, decision making, critical/creative thinking)
3. Develop a disposition to actively listen to and enjoy music for its own sake (appreciate the diversity of musical styles and forms and how composers and musicians interpret human experience and the world around them)

Professors' Responses to the Goals

University experts had more difficulty addressing Goals 2 and 3 than Goal 1, perhaps because these goals were poorly written or not articulatedwell by university researchers. For example, professors were quick to spot contradictions embedded in the goals, particularly in Goal 3 with respect to studying "music for its own sake" versus studying music in social context. Goal 1 was troublesome because "communicate meaning" was included with the focus on studying the elements and symbols of music. To P2 and P3, "communicate meaning" represented a distinct or competing idea in relation to studying elements and developing concepts.

Goal 1

Goal 1 was to *develop an understanding of how musical elements and symbols (pitch, rhythm) are selected, organized, and presented by composers and musicians to communicate meaning.* What important understandings or generalizations should be developed if this goal is to be accomplished?

P1 thought a regular classroom teacher would not be able to accomplish any of the goals, feeling that only music specialists would understand these and be able to teach them to students. P1 outlined 10 key understandings related to Goal 1. First, students need to understand that "music is an arrangement of sound and silence." The next six points outlined the following elements of music: pitch, rhythm, harmony, modality, timbre, and texture. Under each of these were short statements related to each of the elements. For example, under pitch, "pitch may be high or low. A melody is a series of pitches. This series of pitches called melody may go up, down, or straight ahead. Duration may be imposed on pitch." Rhythm included understandings related to steady beat, meter in two's or three's created by accented and unaccented beats, and rhythm patterns. Modality and timbre included understandings about expressive qualities in music. Texture depended on whether several different melodies, pitches, and instruments were occurring at the same time as well as "the number of instruments playing and what they play." After listing these elements as important understandings, P1 provided three more understandings:

> Notation is necessary for a performer to be able to replicate exactly what the composer wants. The composer chooses particular musical elements in order to express his feelings or intent through the music. Changing one or more of the musical elements alters the intent communicated to the listener.

P2's first comment was that "tone" is not an element. P2 listed pitch, duration, timbre, and dynamics as musical elements. "Sometimes style and form are included by music teachers as a means of analyzing extant music in terms of elements." P2 suggested that one of these elements is more influential than the others, and this element may be pitch/melody. This expert said that one analyzes music when one learns to listen to it and that a focus on musical elements provides a common vocabulary for teachers and students in this analysis. Giving several examples, P2 suggested that "the concept [of rhythm, melody, etc.] is taken out of music and looked at from several angles. Then [it] is reinserted into the music and students are asked to listen for what [it] contributed to the music." Such study cannot take place without aural stimuli. P2 was more cautious than P1 about the last section of Goal 1, "using the elements to communicate musical meaning," omitting this until later discussion. In P2's opinion, communication did not fit well under Goal 1.

P3 argued that learning about pitch and rhythm or the elements of music will scarcely teach a child about music. This expert stated that pitch, rhythm, timbre, harmony, and meter are "not the elements of music" and that communication is "not the purpose of music," despite rhetoric in music education to the contrary. P3 stated that there are 12 central concepts in music which can be organized into six categories. We will quote this expert at length since the elements of music are not assumed to exist in the same ways that the other two experts viewed them. P3 argued that music is not a fixed, external object but an abstract and fluid thing that rests on human cognitive construction in all phases of its existence--composing, performing, and listening. To P3, music is "thinking in or with sounds," a natural cognitive activity that occurs in interaction with a musical style and community.

First, P3 outlined concepts which are temporal, in that they bear on the "simultaneous" and "successive dimensions" of music:

1. Music has a simultaneous dimension. Sound events can happen at the same time.

   a. Textural abstraction: Two or more melody and/or accompaniment structures may occur at the same time to form what is called texture.

   b. Motivic synthesis: Two or more short motives (short melodies) may occur at the same time (especially in part-singing).

   c. Timbre synthesis: Interesting blends of sound can be made by two or more timbres combined. (A timbre is the peculiar tone color of a particular instrument.)

2. Music has a successive dimension. That is, sound events happen one after the other in a way that makes sense as a coherent piece.

   a. Idiomatic construction: All music starts with a short, coherent motive (or a unit, such as a melody) that makes sense within the musical "idiom" of the culture to which it belongs.

   b. Motive chaining: When motives or units are chained together they create longer phrases. Also, of course, a phrase could be subdivided into its component motives or units.

   c. Patterning: This is a special case. When short motives are repeated or when two different ones alternate, patterns result.

   d. Phrasing: Once a phrase has been made (see b above), phrases can themselves be chained together to create longer sections. Also a longer section is subdivided into phrases.

According to P3, music also has nontemporal processes:

3. Closure: All music makes use of special devices to signal the end of a phrase or, more forcefully, the end of the composition.

4. Transformation: All music contains transformations or variations on material used earlier in the composition. There are three types of transformation:

   a. Relative repetition: The simplest transformation is repetition with only a change of key (transposition).

   b. Ornamentation: A phrase is transformed by adding extra tones to a basic structure.

   c. Substantive transformation: The structure itself is transformed by changing the rhythm, inverting the contour, or some other major change.

5. Abstraction: Often, some element of a composition will be abstracted out of its original context and used later in a new context. For example:

   a. Rhythmic abstraction: A rhythmic pattern is used elsewhere, perhaps with a different melody.

   b. Motive abstraction: A short motive (short melody) appears elsewhere with a different accompaniment, rhythm, etc.

6. Hierarchic structure: Music is organized hierarchically around a "deep" structure that forms the basis for its organization.

By "hierarchic structure," P3 meant that competent listeners do not treat the thousands of tones in a composition with equal regard. Rather,

> some tones are singled out as central, pivotal events in giving the piece its overall shape and effect. The process is hierarchic in that our understanding of complex pieces of music can be described by imagining several successive levels of importance.

P3 argued that musical notation is a reflective act that arises from a consideration of which features are most salient and in need of recording. No form of notation records all aspects of a piece of music. Notation is only a record of what has been reflected upon and thought important. Unlike P2, P3 stated that musical thought goes beyond mere transmission, perception, and memory of preexisting musical sounds. It has as its origin the cognitive construction and creation of (perhaps new, hypothetical, or not-yet-existing) musical entities whose purpose is the formation of a temporal organization rooted in movement. Adequate perception and memory may be necessary, but not sufficient conditions for the performance of musical operations. This point also contrasts with the view of P2, who emphasized listening and memory.

Finally, P3 noted that some principles may be implicitly or informally understood by students from multiple encounters or experiences in music outside of school. An ideal curriculum would result in students being able to experience and understand the processes of closure, transformation, abstraction, and hierarchic structuring as they occur in compositions across different styles. Ideally, students should be able to make use of such processes not only in listening but also in their own performing and composing.

> The primary medium for instruction should be shared performance, critical listening, and musical interaction with other people, rather than a collective of individuals' interactions with a printed page. . . . Creative, constructive activity should compose the bulk of what students do in music class.

Comparison of key understandings for Goal 1. First of all, a key understanding for students to learn is what music is and is not, or its definition. P2 did not supply a definition; P1 and P3 did. P1 defined music as "an arrangement of sound and silence." P3 defined music as an abstract and fluid thing "that rests on human cognitive construction in all phases of its existence--composing, performing, and listening. Music is thinking in or with sounds that occurs in interaction with a musical style and community." P3's notion about music as an abstract, fluid thing contrasts with the descriptions of P1 and P2. They approach music more as a fixed, external object to be perceived, transmitted, or performed, an approach which P3 disagrees with.

Secondly, since Goal 1 speaks to the elements of music--or ideas specifically identified with music--many of the key understandings were related to these elements. Before including P3 in this discussion, let us compare the lists of elements provided by P1 and P2:

P1	P2
pitch	pitch (melody)
rhythm	duration
timbre	timbre
modality	dynamics
harmony	style
texture	form

In P1's list, pitch, texture, and modality all relate in some ways to understanding harmony. In others words, to understand harmony, one would need to understand pitch and modality. In P2's list, duration is an understanding prerequisite to rhythm, which encompasses several concepts besides duration. Further, most of the elements in both experts' lists relate to P2's inclusion of style and form. For example, style and form are larger concepts that incorporate multiple, smaller musical elements or concepts (i.e., pitch, rhythm).

P1 incorporated some of these understandings and relationships within the categories provided. For example, under pitch P1 stated, "a melody is a series of pitches." P1 also acknowledged relationships among categories: "Duration may be imposed on pitch." P1 included understandings about combining or manipulating elements which occur simultaneously in music and also acknowledged that notation records these elements so that others can "replicate exactly as the composer intended." Although acknowledging purposeful activity in organizing these elements, P1 did not elaborate on what is meant by the composer's "intent" or "feelings" communicated. P2 suggested that pitch or melody is more influential than the other elements listed, yet how this is so, or how this then is related to the other elements, was not elaborated. P2 omitted discussion of communicative intent, as did P1.

While P3's list appears more elaborate and inclusive than the lists of either P1 or P2, it presents many of the relationships implied by P1 and P2 in their discussion of these elements. While denying "elements" exist (as opposed to concepts), P3 lists and organizes these all the same. What is illuminating about P3's outline, however, are the relationships implied among these understandings. Some understandings are equally large or important (temporal/nontemporal, simultaneous/successive); and while some seem to fit snugly under the categories P3 provided, others do not. For example, we might argue that closure has a temporal rather than a nontemporal quality. If "idiomatic construction" is a temporal, successive dimension (starting with a short, coherent motive), it seems that closure also relates to this dimension. Others might argue that textural abstraction and motivic synthesis are the same understandings.

In fact, all three ideas under "simultaneous dimension" relate to texture, two relying on melody and one relying on timbre, and texture means simultaneity in sound of some sort. Understanding transformation also requires understanding the successive dimension of music related to sound patterns (melodic and rhythmic). Whether or not one agrees with P3's comprehensive outline, the elements in the lists of P1 and P2 are evident in P3's outline. Both P1 and P3, to different degrees, speak to the simultaneous, complex features of these interacting musical elements, and on this basis, P1 and P3 might disagree with P2's notion that pitch/melody (or any element) takes precedence over others in music.

Professors' comments in this section also suggest some other things. P1 accepts ideas in Goal 1 related to a composer's intent or communication, uses these, but does not expand on them. Thus, it is unclear how supportive P1 really is of fostering this understanding and how critically the goal has been explored in the exercise at this point. P3 stated that "communication is not the purpose of music," yet supports music instruction as an authentic kind of oral transmission and cognitive activity to be shared in social context. P3 elaborated: "To return to the analogy of language, an early focus on notation is like teaching word reading in advance of speech; worse, imitative performance of precomposed music is like the transmittal of a fixed body of sentences."

Therefore, it is unclear how the experts interpreted "communicate meaning" in Goal 1 and why P2 and P3, in particular, found it bothersome. Communication does not have to mean simply decoding written language, symbols, or musical notation or listening to precomposed music. However, both P1 and P2 viewed the learning of musical notation and listening as such, and both obviously felt that learning the language of music was important in an ideal curriculum (learning notation and musical elements as terms, common understandings, or developing a "shared language"). P3's concern about emphasizing "secondary" content (learning notation) was described as follows. Such interests "place emphasis on noncognitive acquisitions. . . , and they erroneously attempt to teach formal knowledge of notation, music theory, and so on, before rather than after cognitive understandings have been acquired."

Further, the professors differed greatly in terms of whether they perceived music as received or reflexive knowledge. For P1, notation and what the composer intended could be interpreted and reproduced "exactly." For P2, learning the elements was based primarily on the study of aural stimuli, extracting elements for analysis, and reinserting these into an external object called music. For P3, notation could not possibly record all aspects, subtleties, and nuances of a piece of music. Notation was only a composer's sketchy, reflective record. P1 and P2 were alike in their orientation to teaching/learning: Knowledge is primarily received. For P3, knowledge is a reflexive, cognitive construction derived as much from creation or composition as from listening or performing others' work.

Professors' Perceptions of Relationships Among the Key Ideas of Goal 1

Professors then were asked what kinds of relationships exist among the key understandings they listed for Goal 1. For example, do all the key ideas fit together into a single network? Are two or more of them linked through cause/effect, rule/example, whole/part, or other logical relationships? Do some of the ideas form natural sequences along some common dimension? Much of this question was addressed explicitly or implicitly by the experts in the previous response.

P1's reply about the elements of music was that elements

> form a gestalt--the whole is greater than its sum. Dissect a piece of music into its individual elements and the music is gone. Thus, the composer's choice of individual elements affects the whole--change any element and the whole is different, the intent is changed. The composer chooses the elements in relation to one another--not separately.

There are implied logical relationships in what P1 presented as singular elements, however. For example, pitch seemed to have been conceived as a part-to-whole concept in relation to melody in the list of elements P1 provided. Also, pitch seemed to be a smaller understanding under the element of harmony, that is, "harmony can be created through a combination of notes or sounds (pitches)." However, P2 also merged some of the concepts under the larger categories, that is, "duration may be imposed on pitch." (Duration is a rhythmic or "temporal" concept.)

A cause-effect relationship seemed apparent in P1's responses related to notation and expression/intent of a composer. For example, music is notated so that performers are "able to replicate exactly what the composer wants." These logical relationships used by P1 may be due to the arbitrary relationship implied in the goal statement submitted to experts. As written, the goal assumes that composers select, organize, and present elements of music to communicate meaning. P1 tried to accommodate this intention--or why composers do what they do with elements; P2 rejected this assumption fairly early on; and later, P3 rejected this statement about communicating meaning as well.

Like P1, P2 anchored the elements in examples in which pieces of musical literature would be approached from several directions, or several pieces of music exemplifying the elements under analysis would be prominent. At this point, P2 suggested that pitch is probably the most important of all the elements but later conceded that perhaps understanding form was more important. Though P2 did not explicate this idea, creating or discerning form in a piece of music relies on understanding rhythm and melody concepts; therefore, form is a more encompassing idea than pitch or melody by themselves.

P3 argued that concepts be in music rather than about it, meaning that concepts should strictly deal with how sounds are organized. Concepts ought not deal with composers' lives, how war or religious fervor influences music, what makes a string vibrate, or other matters that lie outside purely aural, nonsemantic experience with sounds. The nonmusical, nonsound topics are related to music, but according to P3, they are not "in music" and cannot be substituted for musical education. Further, musical concepts occur in the music of many different cultures. P3 argued that this cross-cultural breadth is important for two reasons. It indicates that the concepts listed are "truly central to music," and it provides an opening for children's musical taste to extend beyond that of their own culture.

Together, the concepts which P3 outlined earlier were conceived as forming a coherent basis for how music is understood. Succession and simultaneity form the temporal aspect of music, while the remaining processes are nontemporal. Beyond that, P3 did not identify cause-effect, whole-part, or sequential relationships among those processes. In fact, P3 viewed such relationships with suspicion because of research conducted with nearly 100 youngsters. P3's hypothesis that temporal concepts were necessary, and thus should precede developmentally to the more abstract, nontemporal processes (closure, transformation, etc.), was not supported by P3's empirical research. While it seemed logical that before one could understand closure, one had to understand that music moves forward in time, the research did not support this. These different concepts appeared to develop in children at about the same rate.

P3 distinguished two forms of content in the music curriculum as primary and secondary: (1) Primary content is the information possessed by one who can be said to "really know" music. This information is musical style principles and the generic, musical-cognitive processes described above. (2) Secondary content includes symbol systems such as notation that "merely describes music," information *about* rather than *in* music (names of scales, facts about music history and famous composers), and the ability to reproduce in performance a fixed repertoire of compositions.

Comparison of relationships of key ideas for Goal 1. It is now clearer that all of the professors view the key ideas in music as highly interrelated and interactive. Music cannot be understood meaningfully by understanding only one element in isolation of the others. Of these three experts, P3 seemed more articulate about how the elements of music and other key understandings are related. Unlike P3, P1 and P2 do not even agree on all of the elements identified as key understandings nor the relative "size" of concepts or elements of music and exactly how they are related. But they all seemed to agree that the elements of music form a kind of "gestalt."

All professors seemed to agree that most understandings developed in music should be *in* music, not *about* it with a lot of peripheral attention to social or historical context or how things work (what makes a string vibrate). P3 was particularly adamant about this, identifying such understanding as "secondary" to understanding style principles and cognitive processes peculiar to musical thinking. For P3, developing a conceptual understanding of music first provides access to other styles and cultures because musical concepts can be understood and are generalizable across styles and cultures. While P1 and P2 suggested elements in music are difficult to understand because they are presented and interact simultaneously in music, P1 implied that one would need to address these elements individually first before understanding how they interact or how the whole is organized. P2 also implied that one can extrapolate an element from a musical piece for analysis and reinsert it. Despite the complexity of these relationships, P1 and P2 seemed to rely on a part-to-whole approach to these relationships. However, P3 viewed cause-effect, part-whole, and sequential relationships with suspicion. This leads us to the next problem.

If music is so complex, how do you organize and present it for instruction so that students will come to understand it?

Organizing and Presenting Key Ideas in Goal 1 to Students

When asked how they would organize the key understandings and generalizations related to Goal 1 for presentation to students, university experts responded as follows. P1 provided three primary activities implied in a sequence. Each of the concepts would be "experienced musically," "manipulated musically," and "recognized in listening examples." Under experience, P1 listed "hearing and identifying the musical elements" and "performing (singing and playing examples of the specific musical elements)." Under manipulation, P1 listed "manipulating sounds to express these musical elements and experimenting with changing various elements to see how the total effect is changed." Under listening, P1 listed "exploring how composers use these elements to express musical meaning." No rationale for this organization was provided by P1, nor was "musical meaning" defined.

P2 stated that "in order to reduce the quantity of material taught, the . . . elements [I] suggested . . . would each be used to explain how one analyzes music, how one communicates to performers about music production, and how one listens to music." These elements would be used in the classroom as students performed, judged, and listened. The exemplary music teacher would also incorporate these elements into the teaching of music history (use of elements in different cultures, styles, and by different composers). At the upper levels, "genre may be used as a concept to gain understanding of these elements."

P2 also suggested that these elements were "nested," making instruction all the more complicated. P2 gave the following example: "The use of melody is different in chant and in hymns, a Philip Glass opera is different from one by Puccini or Handel, but still real music must be used as a part of the instruction." Thus, content selection of musical literature used to explore elements is a difficult decision teachers or curriculum developers must make. P2 distinguished "real" music from "contrived" music by stating that "contrived music is used to demonstrate the difference between a scalar melody and one that leaps, but it can only extend knowledge so far." P2 suggested that students need to listen repeatedly to examples or have several encounters with "real" music.

To carry out a goal related to understanding and manipulating musical elements, P2 stated one would have to learn to read musical notation or how musical symbols are selected, organized, and presented:

> Music has a well developed symbol system. [Regarding notation], . . . composers can approximate the music that is in their head and performers and conductors can work together in creating (repeatedly) music that one wants to hear and perform a second time. Amateurs and professionals alike can participate in the world of music recreation.

Reading music is an important understanding, in P2's opinion, because "with mastery of music symbols, [one] becomes independent. Knowledge of the language of music allows one to perform (enjoy) any kind of music at any time by oneself." In learning to read music, "one can perform music of most cultures, thereby gaining a better understanding of the people and the culture."

As in reading text, the student must learn that reading music means more than decoding. He has to put the elements together "with expression and feeling for them to make sense." For P2, "meaning" (implied in Goal 1) could relate to capturing the meaning of the composer or wanting to make music meaningful for ourselves and friends when we perform it. However, P2 concluded:

> My emphasis on elements and symbols would be the student's use of them and how their use can help open up the world of music to him. I would be less concerned with how composers and musicians use elements and symbols to communicate meaning.

P3 would have students, individually or in small groups, compose music and then perform, record, and listen to it. This contrasts sharply with P1's and P2's approaches to organizing music instruction, which generally begin with listening to an external work; analyzing and taking it apart; performing aspects of it, focusing on an obvious element; then putting it together again--perhaps with alternative interpretations or manipulations of this or other elements; and then listening to the whole again or other similar, "authentic" examples. However, P3 argued that "students would compose music under the teacher's guidance in such a way as to employ the concepts of simultaneity, closure, etc. . . . These compositions are real music, intended to be performed and heard by others." P3 described the most important principle for instruction: that creative, constructive activity should compose the bulk of what students do in music class. The requirement of constructive activity can be met in part by listening to music ("when it is a critical and reflective listening") and by performing it ("when the student determines his own interpretation"). But the best example of creative activity for P3 is composition:

> Composition . . . is any attempt to generate music anew, whether the music is written down in notation, recorded electronically, or simply stored in one's memory. Composing for a young child may be simply making up a one-line song or generating a 10-second melody for xylophone. For older students composition may, but not does not necessarily, involve notation.

P3 did not want to present these concepts (as vocabulary words) explicitly to elementary level students; that is, "the terms closure and transformation are appropriate terms to be learned by high schoolers with a special interest in music theory, but they have no place in the education of youngsters." The concepts would form the basis for the curriculum (especially in the teacher's mind), but "the terms would not be the content of the curriculum." P3's favored approach involved singing and making music with ordinary classroom instruments or handmade ones. When students make up their own music, this is composing. "They can certainly record it, create a notation for it, rehearse it, and perform it for others."

Comparison of professors' views about organization/presentation of key ideas. P1 and P2 are somewhat alike in their recommendations for organizing and presenting key ideas to students. Taking into account all of their responses thus far, P1 and P2 isolate an element for study beginning pretty much with listening, then performing, and listening again. P2's "judging" is the kind of attentive and critical listening to which both P1 and P3 refer. However, P3's overall approach contrasts starkly with those of P1 and P2, as illustrated in the following chart:

P1	P2	P3
Listen for element	Listen for element	Listen for concept
Perform	Perform	Compose
Manipulate/experiment	Judge	Perform
Listen to other examples of composers' work	Listen to other examples of composers' work	Record/notate
		Listen to own and others' work

All three professors mentioned the importance of selecting authentic musical works as content to teach the elements of music. P2 admits that this is a difficult decision when one considers all the musical styles and genres available and how the elements of music are expressed within and across these. P1 refers to exploring how other composers use these elements to communicate meaning. P2 distinguishes "real music" from contrived music in much the same way that P3 speaks of "real" and "not-real" music. All three allude to the fact that other cultures and styles are made accessible to students through this content selection for listening and extrapolating elements for analysis. Unlike P2, P3 would argue that musical elements are generalizable and understandable across genres and styles.

P1 and P3 include student experimentation and composition, whereas P2's approach to performance is to re-create others' (adults') work. P2 rejects "communicating meaning" in Goal 1 but discusses the importance of this as expression and feeling in interpreting and recreating others' music and in judging what students are to hear or perform. For P3, the students determine the interpretation; it is dubious that options would be that open to P2's students.

P1 does not address music reading or notation, but both P2 and P3 do, however, in very different ways. Learning to read notation is important to P2 for students' re-creative performance and ultimate independence as musicians. P2 reasoned that if students can read music, they can read and perform music of other cultures because musical notation is a universal, stable language. P3's approach to notation, however, is that students would notate or record their own compositions in whatever figurative system made sense to them. Younger students would not have to notate at all. Further, P3 would begin with composition, and all other matters such as performance and listening would be geared primarily toward students' compositions--not adults'.

> The class may listen to and discuss examples of adult compositions (in a variety of styles) that exemplify the same objective students have been working on. [Further], an experiential base acts as the foundation for the later learning of more formal information about music, such as the conventions of musical notation and the names of particular techniques.

What is less obvious about P3's approach (at this point anyway) is that the teacher often sets the stage for students' compositions with a particular focus in mind. This is not much different than P1 and P2 identifying musical elements, concepts, or ideas that will be studied. It is the emphasis on students or a learner-centered environment that most differentiates P3 from P1 and P2. One has the feeling that the classrooms of P1 and P2 would be much more teacher-centered than P3's classroom. One also has the feeling that P2 may be more familiar with secondary-level instruction than with elementary, given the focus on listening to and recreating great works through performance.

Professors' Sample Lesson Plans for Goal 1

Experts were asked to design sample lesson plans for Grades 2 and 5 to illustrate the development of one of the key ideas they listed under Goal 1. For a key understanding in Grade 2, P1 wrote, "The composer chooses particular musical elements in order to express his feelings or intent through the music." P1 suggested that this would be a difficult concept to present to second graders, although it could be introduced and grasped by some if students had had previous experience with the elements identified. P1 said that some of these elements would receive greater emphasis in second grade than others, particularly pitch and rhythm; next in emphasis would be timbre/texture; and least important would be harmony and modality. No rationale was given for this selection; perhaps assumptions were made about student development. (Research suggests that most students do not understand harmony and modality well in the primary grades, nor do they typically study this formally until the intermediate and upper grades with the introduction of vocal rounds, part singing, and band/orchestra.)

P1's overall plan for developing the above understanding in Grade 2 was as follows. Choose two or three elements as "the constant" through the series of lessons. (P1 chose pitch and timbre.) Students then would have directed listening experiences with musical compositions that contained obvious, easily identifiable examples of pitch and timbre. Then students would sing songs that illustrate use of pitch/timbre. Next, they would add instrumental accompaniments featuring pitch and timbre qualities and create compositions using pitch/timbre. Students then would experiment with changing the pitch or timbre qualities in their compositions to "hear how the expressive intent of the piece is altered by manipulating the particular element." Finally, students would listen to the composed works again to focus on the composer's choices related to pitch/timbre. "Speculation might take place on what the composer could do to change the piece by altering pitch/timbre."

In the above example by P1, there is little evidence of what kinds of choices are available in relation to pitch (only timbre, and in terms of students deciding which instruments would sound better for a particular part of a song). P1 suggested choices be discussed with students, but gave little information about what kinds of criteria might guide their decisions. The sample lesson for Grade 5 was identical to Grade 2 in terms of overall plan. "It would only be adapted with activities on a level of difficulty appropriate for fifth graders," P1 stated. The Grade 5 plan also ignored pitch as a central element along with timbre, despite the lesson objective identified. Finally, there was little explicit discussion of composers (or students) as decision makers--or their intentions, motivations, or feelings as composers. This, recall, was P1's stated objective.

P2 did not formulate a specific lesson plan but described briefly what could be done with melody:

> If melody can be considered an element . . . , I would give a whirl at demonstrating the difference between a Schubert melody and a Beethoven melody, but the primary purpose would be to point out that one must listen for specifics or one does not hear much of anything. I might demonstrate to youngsters that if one doesn't look for specifics in a work of art, one might not see. Artists take pleasure in being subtle. . . .
>
> I would be careful about placing too much emphasis on the elements of music at the expense of my real music objective. In order to reduce the quantity of material taught, the five

> elements suggested . . . would each be used to explain how one analyzes music, how one communicates to performers about music production, and how one listens to music. These elements would be used in the classroom as we performed, as we judged, and as we listened.

P3 considered how one might teach the concept of musical transformation. The class should be divided into groups of two or three, or individuals might work alone. Each student would have one, preferably two instruments (bells, wood blocks, drums, xylophone, recorder/flute, etc.). The teacher would begin by explaining that music often has "an idea, and then the same idea but a little bit different, and then the same idea but quite a bit different." The teacher would play for the class a three-part composition of her own, which would be about 15 seconds in duration: Part 1 would be a statement of theme; Part 2 would be the first transformation; and Part 3 would be a second, more distant transformation. P3 then presented a short rhythmic pattern to be played on a wood block or tambourine. The teacher would demonstrate her composition, giving an example of the concept of transformation. "Two or three examples may be necessary for second graders; one or two should suffice for older students."

At this point, students (individually or in groups) would create 15-second compositions using this same model: theme plus two transformations. Students would take from one to three lessons generating a composition, depending on their prior experience. Students could develop their own notational system for recording their compositions with the following caveat:

> There are two requirements to make it "count" as a composition: It must be repeatable, and it must be memorized. The point is, you do not have a real composition until you can perform it for an audience at any time. If you've forgotten it, it counts as improvisation (not undesirable) but not composition.

After composing, three activities would follow in P3's scheme: (1) notation and/or recording--"a written system for setting the music down on paper could be devised, or a tape recorder could be used"; (2) performance--each group performs for the class or makes a tape to be heard later; (3) listening, discussion, and evaluation--students would "talk about their work as much as possible, but I would not put great emphasis on good/bad evaluation."

Two adjunct activities that P3 recommended accompany the listening-evaluation component were "listening to records of 'adult' music that also embodies transformations and identifying that it does so." Any classical theme and variations would work, but P3 suggested that the material be vastly shortened using prerecorded excerpts of only the opening phrase of the theme and "two and only two variations." The result should be no longer than one minute for young children and two minutes for upper elementary. "But this should be repeated so that the students hear it three or four times." P3 recommended examples be used from folk music and non-Western music. Furthermore, students could teach their compositions to each other, or, using the notation or tape recordings, a student could teach himself the composition created by another. "This works best with older students," P3 stated. "Also, the door is left open for variation and expansion on someone else's work." More performance, listening, and discussion would follow.

P3 did not see major differences in structuring the activity proposed for Grades 2 and 5. "Older children can handle longer compositions, complex combinations of instruments, and more advanced instructions. But the concepts remain the same." P3 emphasized the nonsequential nature of these particular concepts. The curriculum cannot cover transformation in the early years, be done with it, and move on to "higher concepts" later. Transformation, like the other concepts, "appears over and over again in many musical styles in our own culture and around the world. At every level of the curriculum, we should be rediscovering transformation, closure, and the other concepts I've detailed."

Comparison of professors' lesson plans. From P1's Grade 2 lesson, we do not know why P1 thought the objective would be difficult for second graders. Unlike P3, who believed that almost all musical concepts could be approached at any grade level because these concepts present themselves in all music, P1 believed that some concepts cannot be understood in the early grades, like harmony and modality. P1's lesson plan follows a particular sequence (matching the previous section on organization), beginning with directed listening (presenting the concepts of pitch/timbre in obvious ways) and moving to singing songs that highlight pitch/timbre, adding accompaniments and/or creating compositions with experimentation, and listening to exemplary adult works. "Speculation might take place on what the composer could do to change the piece by altering pitch/timbre." Both Grade 2 and Grade 5 plans attended little to pitch as a central understanding along with timbre, and discussion of composers' intentions or expression of feelings was peripheral. Criteria to help students make such decisions were not discussed.

We do not get a clear sense from P2's description of how comparing two melodies would be taught to second and fifth graders or what this would look like in actual practice. However, P2's approach suggests that students are more recipients of adult music than they are creators of their own music and musical understanding. Listening to, analyzing, and re-creating adult works through performance seem pronounced, much as one would find in high school band or chorus. P2 does pay attention to the subtlety of artistic works and the need for students to discern and appreciate subtlety in these forms through critical analysis.

The only difference in P2's and P3's introductions is that P2 would use "external" music and P3 would have the teacher create/compose the music to demonstrate the concept to students. P3, like P2, holds something "constant" by zeroing in on particular elements or concepts. Thus, both try to eliminate distracting variables by choosing examples that feature the concepts to be taught in obvious ways. But P3 would seem to be more successful than P2 in treating a concept's complexity with youngsters. While P2 attempts to address a composer's intentions, feelings, and decisions, as well as two elements--pitch and timbre--the lessons do not demonstrate a thorough articulation of all of these ideas or how they are related. P3's lesson does address the composer's decisions, particularly with extensions into notation, classroom discourse (much student talk), cooperative learning, peer teaching, and independent work. P3 admits that older students can handle longer compositions and more advanced instructions, but the concepts and approach remain the same. Finally, P3 seems quite sensitive to limiting the listening or demonstration examples (15 seconds) and repeating these several times. P3 does not assume that students will "get it" in one demonstration or listening.

Goal 2

Goal 2 was to *develop an understanding of the artistic process in composition or performance to create musical forms with expressive intent (choices, decision making, critical/creative thinking).* Experts were asked what important understandings or generalizations should be developed with students to achieve this goal.

P1 responded to this goal with the following key ideas: (a) The "understandings listed in Goal 1 are needed for this goal," that is, the elements of music can be manipulated to create an expressive quality or the intent of the composer. (b) Composers from different time periods choose different compositional devices to express their musical meaning. (c) Music composition "utilizes repetition and contrast as its basis. Using these in a variety of ways the composer creates a musical form or structure for his piece." (d) The choices the composer makes concerning the combination of musical elements affects the final product (same as in Goal 1). And, (e) the meaning of the music is brought to it by the listener, no matter what the composer intends. Here, P1's focus is more on the formal elements of music than on historical context. Four of the five key ideas generated by P1 were related to formal elements and not to the social, cultural, or historical context of music or the composer. The kinds of thinking or decisions made by a composer seem to be related mostly to juggling these formal elements or properties of music, not about meanings or messages the composer might wish to express to an audience.

P2 suggested that

> critical thinking is not usually employed by performers, arrangers, conductors, and probably not composers. . . . A lot of inspiration occurs with first-rate composers--Mozart being one of the best examples. Craftsmen like Beethoven with his sketch pad would come a lot closer to the model of the critical thinker.

P2 concluded that efforts to have students engage in the creative process have not been too successful. "One has to not only think but have considerable musical memory in order to use critical thinking in composition." For P2, critical thinking would most likely occur when considering how to interpret an entire composition, as in arranging and choosing among many alternatives. The kinds of questions a composer might consider were offered by P2:

> What kind of music? Who will be the performers? How competent are they? How large should the group be for which it is scored? How do the words relate to the music? Is the music for a special occasion, and how does that affect the type of music? How long should the music be? How do I change the melody to make it interesting? Will it work if the bass parts also have an attractive melody? How can I get the audience to understand my feelings--using clarinets or violins?

According to P2, judgments remain an important objective, "even under this goal related to artistic process." P2 listed several understandings related to judgment:

> All music is not of equal value. All performances are not equally valid. One has to know why one piece of music is better than another (even though one does not like the music), and one can learn to make decisions.
>
> Values in the arts are established by experts, and the more expert one becomes, the more one's judgments will be like the experts'.
>
> Standards apply to the technical aspects of music (elements and methods of production) and interpretation. Good judgments are facilitated by developing high-level perceptual skills.
>
> Values are culturally based. If one understands how hard or easy the music is to perform, when the music was written, how complex and intricate the music is, how unusual or common the expressive devices are and similar facts, these constitute the data base upon which one makes a decision.

P3 addressed Goals 2 and 3 together and not in great detail, stating that that these goals were incorporated adequately in the response given to Goal 1. The way P3 described concepts, organization, and teaching under Goal 1, "understanding the artistic process" is accomplished by having students engage in the artistic process. Knowledge or facility with musical elements is not a prerequisite to this activity or understanding:

> Greater understanding than what is called for by active engagement is . . . not appropriate for the elementary

> curriculum. By that I mean that philosophers are themselves confused about how to understand artistic processes (and artists are even more confused), so I would suggest sparing children from too much work on this topic until they enter college.

What is desirable in the elementary curriculum, according to P3, is "real engagement in the process, no secondhand observations of what adult artists are doing."

Comparison of key understandings in Goal 2. P1 implies that in order to engage in the artistic process, one has to have some knowledge and facility with the elements of music. Composers confer form and structure on musical elements much like artists confer form on visual elements and materials. While P1 focuses primarily on knowledge of elements in Goal 2, P1 acknowledges that composition and the artistic process are historically embedded or context-bound (styles occur in time). P1 also suggests a cause-effect relationship with respect to the artistic process: A composer's particular choices lead to particular outcomes. Finally, P1 contradicts statements made under Goal 1 with respect to perception and listening. Now, P1 suggests that the composer must admit that no matter what he or she intended, listeners will construct their own individual meanings.

P2 appeals to criteria and standards created by a musical community of experts that would assist artists and audiences in distinguishing between the commonplace and creative. The more one knows about the elements, the more one is in a solid position to make well-reasoned value judgments, a view similar to those of P1. P2 implies that most adults do not engage in critical thinking and seems doubtful that youngsters can do so either. Young students are viewed as neither potentially creative nor capable of thinking critically because they lack musical memory. However, many of the composer's questions supplied by P2 could be asked and answered by student-composers at the elementary level, according to P3. P3 just wouldn't have students trying to figure out how and why adult composers create.

P2 also mentions that decisions made in the creative process include feelings which the composer wishes to communicate to an audience. Thus, P2 injects another contradiction with respect to "communicating meaning" that was troublesome to P2 in Goal 1. All three professors, whether in this particular response or in previous ones, acknowledge the social context of music; that is, creating music is not so much a private, individualistic endeavor as it is guided by, if not somewhat constrained by, shared understandings in a social context or musical community.

Professors' Perceptions of Relationships Among the Key Ideas of Goal 2

Again, the experts were asked what kinds of relationships exist among the key understandings listed for Goal 2 and the artistic process. Do all the key ideas fit together into a single network? Are two or more of them linked through cause/effect, rule/example, whole/part, or other logical relationships? Do some of the ideas form natural sequences along some common dimension?

P1 stated that the first relationship was identical to the one provided under Goal 1 (i.e., the elements of music form a gestalt; the composer chooses the elements in relation to one another--not separately). P1 added other relationships among key ideas perceived to be under this goal: "Listening to a wide variety of musical styles will help students realize that although each composer basically works with the same musical elements, the manner in which he/she manipulates these elements creates a very different expressive product." In addition, P1 stated that students will realize that they themselves perceive music in different ways based on their individual backgrounds and previous experience with music.

For P1, the artistic process of composing or performing relates foremost to the manipulation of given formal elements of music, colored more by individual background, experience, and choice than by one's social/historical context--or the rules/principles shared in a musical community in a particular time and place. (This contrasts sharply with P3's view and somewhat with P1's own previous response.) P1 viewed the elements as stable entities which composers manipulate to create different effects. There is an implicit assumption that composers need to know and understand musical elements before they can engage in the artistic process. There is little suggestion here that composers also are "perceivers." P1 contradicts his/her previous discussion in Goal 1 about composers' intentions and listeners' own perceptions/meanings. Now, the composer cannot control what the listeners will perceive or understand from his/her composition because "the meaning of music is brought to it by the listener, no matter what the composer intends."

P2 listed points related to key ideas under this goal in the previous section, and it is difficult to determine what the relationships are among several of those ideas presented in a list. However, P2 stated earlier that making value judgments in the creative process is guided by shared standards and criteria. Like P1, P2 implied that one must know the elements before engaging in the creative process or making adequate judgments. P3 felt that this question was addressed adequately in response to Goal 1. The elements (if these indeed exist) would be understood only through the artistic process of composing. They are best constructed or understood by students in the act of composing and thinking musically.

Organizing and Presenting Key Ideas in Goal 2 to Students

Experts were asked how they would organize the key understandings and generalizations related to Goal 2 for presentation to students. P1 began the response to this question by "assuming the students have had the experiences and understandings discussed in Goal 1" (understanding the elements of music). An overall plan for presenting Goal 2 to students can be summarized similarly to Goal 1: Students would listen to selected music, express themselves through singing/playing, and create compositions by manipulating the musical materials themselves. Specifically, P1 would have students listen to a wide variety of musical styles through directed listening experiences; recognize repetition and contrast in music; recognize basic structural forms (phrase, AB/ABA, rondo, theme and variation); engage in directed listening lessons to evaluate students' reaction to the expressive qualities of the music; express musical intent through creating sound compositions; and sing songs, experimenting with ways to vary the expressive intent. P2 did not address this section of the exercise. P3 felt that this question was addressed adequately in the response to Goal 1.

Professors' Sample Lesson Plans for Goal 2

In developing a sample lesson for Grade 2, P1 stated that students should have had prior experience recognizing patterns in a song that are repeated or different. P1 suggested choosing a song to sing that has obvious repeated patterns, "perhaps accentuated by the same repeated text," and providing students with opportunities to recognize "same and different" both visually and aurally. Generally, this would begin with recognition of three- to four-note patterns and expand to phrases that are alike and different. Experiences in echo clapping to discern like/different rhythm patterns also would help students, first with repeated patterns and then with invented patterns. Finally, students should be able to identify obvious like/different sections in a song (verse and refrain). To help students understand this better, movement patterns could be incorporated to highlight section differences, AB and ABA form could be depicted in shapes or pictures, or students could learn to identify sections as A and B. P1's Grade 2 lesson focused on students' putting together short sound compositions where the beginning and endings were alike, but the middles were different (ABA). They would perform and notate these sound compositions.

P1's Grade 5 lesson was designed for small-group work on ABA sound compositions in sectional forms. Each group would be instructed on 3 x 5 cards to create a one-minute sound composition in ABA form using "high and low wood sounds" or other sounds. Following each group's performance of its composition, discussion would focus on the choice of sounds students made and why. Then, each group would be instructed to rewrite their composition, changing one major element (timbre of instruments, tempo, or dynamics) and then compare the effects of the two compositions. In the Grade 2 lesson, there was very little discussion with students about their artistic choices. Although the concept of form was presented matter-of-factly at first, students soon would compose and learn to notate their own sounds. Again, for P1 it seems that in order to accomplish Goal 2, students need to have accomplished Goal 1, understanding the elements of music. P1 seems to view the elements of music as the basic building blocks for understanding music. The lessons, as designed by P1, are very much like P3's preferred approach in terms of pedagogy, student composition, notation, and discussion.

P2 did not address this section of the exercise. P3 felt that this question was addressed adequately in the response to Goal 1.

Goal 3

Goal 3 presented to the experts was to *develop a disposition to actively listen to and enjoy music for its own sake (appreciate the diversity of musical styles and forms and how composers and musicians interpret human experience and the world around them).* Again, experts were asked what important understandings or generalizations should be developed with students to achieve this goal. Professors' responses to this goal were most revealing about their definitions of music as a discipline: Music is in or about sound. Despite everything said thus far, music is not about human experience and the social world.

P1 subscribed to the nonparenthetical portion of the goal but stated there was difficulty with the parenthetical statement:

> I do not try to teach students that composers interpret human experience and the world around them in any literal sense. If indeed students are to enjoy music for its own sake, then the composer's intent or the world in which the composer lived is not particularly relevant.

P1 found it more appropriate to provide students with some background information about the composer after they had dealt with the music.

P2 suggested that developing dispositions was best achieved through modeling, that is, teachers presenting and discriminating all kinds of music, and with a program that was sufficiently rigorous and representative (high expectations for "learning serious music seriously"). Like P1, P2 had difficulty with the parenthetical phrase of Goal 3. "To know how composers and musicians interpret human experience and the world around them--my answer is sometimes they don't."

P3 stated that "it is very clear that active listening forms the basis of the activities I outlined above [in Goal 1]. And listening plays a role long before the final listening-evaluation activity." At the beginning of P3's outlined lesson, the teacher demonstrated with his/her own "real" composition rather than telling students about transformations. "Active listening is the only way for students to pick this up," stated P3. "And of course listening, reflection, and deliberation must go on during the entire course of composing. Again, listening to examples of adult music will also be useful."

P3 also disagreed with the assumptions in the language of Goal 3 about interpreting "human experience" and "the world." There was an obvious contradiction in the goal statement, in P3's opinion. "Music's 'own sake' is patterns in sound. Anything else that is not sound--such as love, war, religion, and feelings of any sort--are not at all about music's 'own sake' but are, on the contrary, about people and their world." P3 did not believe that what composers or musicians do is "interpreting" anything related to human experience and the world. It was unclear how P3's previous statement fit with these remarks: The primary objective of music education is aesthetic enjoyment. (One wonders how aesthetic enjoyment is _not_ a human experience, or does not draw upon human experiences.)

> My views rest on a particular aesthetic philosophy. . . . In all of the research and theory that I know of, there is no evidence whatsoever that musical compositions communicate specific information of any kind about feelings or ideas in the ordinary sense of those terms. Consider any composition and a random sample of five listeners. The likelihood is small that they will agree on the composer's intended message or idea.

This was much like P1's response concerning listeners creating their own meanings, no matter what the composer intended. Further, none of the professors acknowledged that some students might not enjoy learning music or deriving pleasure from their encounters with music.

P1 again referred to Goal 1 (understanding the elements of music) as necessary for students to be able to listen actively to music and enjoy it for its own sake. P1 included several other key ideas related to this goal: (a) It is not necessary to like a piece of work to find it interesting or challenging to listen to; (b) composers used a variety of stylistic devices, forms, and genres, often related to the time period in which they were writing; (c) composers were often limited by constraints existing at their given period of time (what is acceptable, possible, the norm); (d) there is no one correct interpretation of the music nor one correct feeling response; (e) until the 20th century, the composer committed his composition to written notation, and the performer interpreted it or brought it to life; and, (f) music that has lasted through time has done so because it has affected the listeners in a personal way. P1 presents a contradiction in the second key idea, having mentioned earlier that the composer's intent or "the world in which the composer lived is not particularly relevant" to students' understanding or enjoyment of music.

According to P2, students should know that sometimes music is set to words. "Schubert used the poems of Heinrich Heine, Goethe, and others. Often musicals are written with the music composer attempting to express his feelings about or to enhance the words." Program music such as Carnival of the Animals or Peter and the Wolf can be used, but P2 said that it is difficult to get students beyond this familiar point. "One who seeks to understand music and to take satisfaction in discovering clever uses of musical ideas will derive more from his or her experiences with music." P2 argued that students should develop a tolerance for music of value other than that with which they are familiar or like.

P3 did not address this section of the exercise but suggested earlier that music is not about human experience. While there may be "no one correct interpretation or feeling response" for listeners, according to P1, composers are constrained by norms in their time and place (much like P2 posited). Both P1 and P2 expect students to develop a tolerance and appreciation for diverse or unfamiliar music through numerous direct encounters and experiences with this music. P1's remarks about finding music interesting or challenging, even if you don't like it, are similar to P2's earlier remarks about reasoned value judgments versus mere opinion, preference, or taste.

Professors' Perceptions of Relationships Among the Key Ideas of Goal 3

What kinds of relationships exist among the key understandings that experts listed for the third goal? Do all the key ideas fit together into a single network? Are two or more of them linked through cause/effect, rule/example, whole/part, or other logical relationships? Do some of the ideas form natural sequences along some common dimension?

P1 suggested again that students need to have knowledge of the musical elements and the ways that composers can manipulate these elements. In addition, students need to listen to a wide variety of styles of music. "To do that willingly, they must get away from the idea that they only listen to music they like. It is necessary to develop in them an open mind, a nonjudgmental attitude." By "nonjudgmental," it was assumed this meant prejudgment or opinion, much like P2's notions of "preference" and "taste."

P2 said that transfer is an idea not sufficiently addressed in music: "The ultimate goal in music education is not learning but transfer." P2 cited band programs as terminal experiences with little transfer value. Thus, primary objectives in band become enjoyment and satisfaction in doing things well because enjoyment and personal satisfaction transfer. These remarks seem to contradict P2's earlier comments about learning music through modeling, drill, and practice. P3 did not respond to this section of the exercise, but might respond that what is to be transferred is informal learning to formal academic settings (and not the other way around) because informal learning is "real" and typically does not occur in schools, though it should. The views of P1 and P2 regarding transfer seem to be the opposite of P3's views.

Organizing and Presenting the Key Ideas in Goal 3 to Students

How would the experts organize the key understandings and generalizations related to this dispositional goal?

Again referring to prior student experiences needed from Goal 1 (understanding the elements of music), P1 added: listen to a wide variety of musical styles through directed listening experiences; focus on particular musical elements through directed listening experiences; "provide opportunities for affective response to the music through observable response mechanisms"; focus on stylistic devices or forms or genres relating to the time period of the music; discuss the musical constraints on the composer relating to the time period; listen to music performed on nontraditional instruments such as "prepared piano, electronically generated sounds, computer-generated compositions, etc." How all of these ideas should be organized is not clear; they are a reiteration of a list provided earlier by P1.

P2 pointed out different types of knowledge forwarded by some cognitive psychologists, such as "propositional, procedural, psychomotor, images, aural knowledge, attitudes, and emotions." Each kind of knowledge or learning follows its own principles; thus, the curriculum designer who hopes to show relationships among these key understandings must point out the key concepts within each type of knowledge. P2, however, did not provide examples of these key concepts within "types of knowledge" nor how they would be related to one another. P2 reiterated the importance of musical memory, both tonal and rhythmic, to hear the music in one's head. To P2, the concept of form seemed amenable to emphasize in performance, creative activities, or listening activities, and form could be used to discuss style and genre (switching from melody, presented earlier). P2 argued that "the emotional message of music is also conveyed through an orderly arrangement of sounds and silences and not an aleatoric system." Finally, in the real world, "music can be a special activity like attending a concert, but music can also be well integrated with work, play, church, and family responsibilities. Specifying these interrelationships in instruction can lead to a more thorough understanding [of music]." What P2 suggests here are real-life applications and meaningful transfer.

P2 was "unable to organize all of the learnings" within a goal according to a natural sequence. However, this expert stated that a simple-to-complex approach might not work as well as obvious-to-subtle, much like P1 discussed. P2 also would introduce "structured music" and "move to the more abstract." In terms of developing students' understanding related to criticism, music history, and aesthetics, this expert expressed caution about organizing these key ideas for instruction, with little additional explanation. P3 did not respond to this section of the exercise.

Professors' Sample Lesson Plans for Goal 3

How might these key ideas related to developing positive dispositions toward music be taught in Grades 2 and 5?

P1 provided the following key understanding for a Grade 2 lesson: There is no one correct interpretation of the music nor one correct feeling response. Over several lessons, P1 would design several activities around Kodaly's "Viennese Musical Clocks." Each of these lessons would focus on particular elements represented in the music, but the primary objective of these lessons would be "for the children to use what is happening in the music to justify their choices. Any answer that can be justified in this manner is acceptable." P1 also stated that some background information on Kodaly or the Hary Janos Suite from which the piece is drawn would be appropriate and helpful. Student responses would vary over these lessons, some verbal (words to describe the music or how it sounds to them), singing, movement, or giving the music a title and comparing their titles to the composer's title.

The Grade 5 lesson proposed by P1 was not much different. It seemed as though P1's notions about disposition were identified as "affective responses" differentiated from conceptual understanding. "As students were listening to compositions in an effort to recognize and to follow a specific musical element, they would also be given opportunities for affective responses." In the sample work sheet provided by this expert, there were few questions that specifically dealt with students' feelings and attitudes about the particular piece of music, or music in general. However, P1 seemed to situate dispositional understanding under developing criteria for making value judgments.

P2 suggested that if students were actively involved in learning and if instruction were well planned, they ought not get bored with listening. "The music selected has to be of sufficient merit that it can be used repeatedly. . . . Changing musical selections when there is no need to change simply jeopardizes the possibility of transfer occurring." P2 suggested that there really is no logical order in which to learn about the music of Haydn and Mozart because nearly all of the important things to listen for are in every piece of music. "It is easier to listen for only one thing at a time when we listen to music. . . . The more expert listener one becomes, the more things one will be able to listen for and hear all at once." One of the main differences between "good and bad" music, in P2's opinion, is that "in bad music one can hear and understand everything that the composer did in a few listenings. Even the most expert listeners hear something new each time they listen to a piece of music [that is good or] exact." Finally, the longer the music, the more difficult it is to determine the form, thus, we must listen to music over and over to understand its shape and form. P2 also made few age-level distinctions, stating that all youngsters can understand these concepts to some degree or another, depending upon their formal encounters with music and their background experiences.

Like P1, P2 suggested that contrast is a basic principle in music composition. In teaching a lesson using the music of Haydn, Mozart, and Bach, P2 suggested telling students that Haydn often incorporated popular folk tunes into his compositions which appealed to the "nobility and commonfolk alike." Students would listen to three dances, one by Bach and two by Haydn that use folk tunes, and describe the difference in what they heard (e.g., Haydn "swings"). Deciding why Haydn and Mozart were better than other composers could be determined by the following understandings: Their melodies were a little better and more elegant; the harmony they added to their melodies was a little more subtle; and they cleverly broke some of the rules of composing without making the listener too uncomfortable. For evaluation, P2 suggested true-false or multiple choice questions related to the sample lesson and some of its main ideas. P3 did not respond to this question, indicating earlier (like P1 and P2) that the more quality encounters students have in music, and across styles and genres, the more they will enjoy and appreciate music.

Teachers' Views of an Ideal Curriculum

Teachers' Responses to the Key Features

T1 agreed with all the key features presented for ideal curricula and strongly agreed that a major deficiency in most existing curricula are clusters of disconnected content that are not organized coherently. T1 added other key features as follows: (a) Teaching of music concepts in "strict sequence. Each concept must be mastered before progressing to the next one which is built upon the previous skill learned." Further, a "master sequence" must be based on "the developmental level of the child combined with a degree of difficulty of the music concept." (b) Only the finest quality of music from various styles should be used. Teachers should not give in to "what is modish in repertoire and methodology" because this results in passing on to students very poor criteria for selecting music independently. (c) The amount of time allocated to music per week should be adequate enough to provide depth of study. "It is painfully obvious that the finest curriculum in the world is of little use in those situations [where some elementary music teachers are responsible for 1200 students once a week for 20-minute lessons]."

T2 agreed with the basic features of ideal curricula presented:

> Limiting content for more depth is good. Many times quantity is stressed over quality, or learning and mastery of skills is sacrificed. However, there is the other view that the job of the

> teacher is to expose children to a variety of experiences so that the student will have a basis for intelligent choices for taste in music. A balance of these two thoughts would be ideal.

T2 added some features to the ideal curriculum: (a) Spiral learning should build upon skills and knowledge from one year to the next. (b) Integration is "the key to understanding how music fits into the student's life. Isolation of one subject from another encourages rote learning with no concept of how this knowledge is relevant to his/her life." (c) Active participation in creating, composing, and performing original musical works will have a lasting impact on students because of "process learning." (d) Higher levels of thinking through problem solving and knowledge application are necessary for being able to read music. "Previously acquired knowledge about the staff, notes, meter, tempo, dynamics, etc. is essential to note reading." And, (e) T2 stated that "fostering enjoyment of quality music" was not a feature addressed in our key features, but it should have been.

"As music teachers, it is our responsibility to spread the joy of music to students so that they will want to learn more about how music can fit into their lives in a relevant way," stated T2. This teacher argued that most students will become consumers of music as audiences for live performance, records, television, and radio. With this caveat, T2 added:

> Unless exposure to quality music is accomplished in school, the only model students have will be what is available at home, which in many cases would be MTV, rock radio, and tapes and records. The minority of students have parents who will take them to the symphony, opera, or chamber concerts throughout the year.

T2 stated that learning music through the study of the elements of music, "combined with skillful teaching will bring music alive." Many students will study musical instruments, sing in choirs, and some will take private lessons and be able to enjoy music as performers. But, "the exceptionally talented musician who progresses to become a professional musician is a very small percentage of the students that we teach." T2 ended this section by saying that an ideal curriculum must address the needs of the majority of students as well as the musically gifted.

T3 generally agreed with the key features presented, but posited key features "which pertain specifically to the curriculum in elementary music. Some of these features amplify or clarify the 'ideal' suggestions mentioned . . . ; some are additional considerations which serve as criteria for evaluating programs and materials." The primary goal of music education according to T3 is musical independence for the learner:

> A musically independent person can make music on his/her own and with others, possesses the skills and understandings necessary to play or sing, derives meaning from musical sources through purposeful listening and description, creates new musical works to express ideas, and seeks out musical activities to fulfill expressive needs in daily life.

In order to develop this independence, according to T3, an ideal curriculum should reflect six characteristics which promote musical growth: (1) music, (2) conceptual understandings, (3) behavior, (4) learner's experience with musical context, (5) teacher/student cognition, and (6) disposition toward music. We will paraphrase and quote T3 at length since much is clarified under these categories in the written descriptions submitted.

1. Music instruction must be based in music, that is, in sound, rather than in knowledge about music. In other words, the primary emphasis should center around opportunities for students to act as musicians rather than to study about those who have acted as musicians. Classrooms based on this premise will have students performing music by singing or playing, students describing music which may be beyond their performance capabilities but can serve as the subject for directed listening, and music that is improvised or composed by the students. Musical literature selected as the vital body of content in the classroom must be carefully selected. "A good curriculum will state criteria for selection of compositions used." Music of high quality, of lasting appeal, and appropriate to the ages of students should constitute this core. The music should exemplify different styles and genres--classical Western tradition in addition to non-Western music, jazz, folk music, and representative contemporary styles. "Using these examples . . . will also help to build a repertoire of shared songs and musical examples for . . . students."

2. Conceptual understanding means the concepts which are embodied in the musical examples above. "These concepts are broad and

far-reaching in their generalizability to different types of music." To qualify as musical concepts, the concepts must reflect the qualities of sound heard or be based in aural experience, rather than in notational symbols used to capture sound. These concepts must reflect the relationships in the music as stated in examples such as "melodies may move up, down, or stay the same" or "sounds and silences with a rhythmic line may be longer, shorter, or the same as the underlying steady beat." Each element may be comprised of an interrelated set of concepts for the learner to acquire. These concepts will allow the learner to categorize and assimilate new works heard.

With respect to the complexity of music, T3 suggested:

> Because we most often deal with an entire work of music, rather than isolated patterns separated from meaningful context, the learner will perhaps focus on a particular concept at a given time, but still deals with the work as a whole and the network or web of musical interactions as a whole.

This closely parallels the Center's third "key feature," emphasizing the relationships between powerful ideas. T3 added that the interactions between elements "also serves the expressive intent of the work, as students have occasion to perceive these interactions and react to the expressive qualities the interactions suggest." T3 explained what are not musical concepts:

> One cannot have a concept of the date of Beethoven's birth, but one can acquire through listening to the Fifth Symphony a deeper conceptual understanding of rhythmic and melodic variation. One cannot have a concept of "treble clef" (a notational device used to denote relative register), but one can have a concept of register--that melodies may be relatively high or low. One cannot have a concept of a "quarter note" (again a notational device), but one can have the concept of durational relationships in which a quarter note might represent a sound twice as long as an eighth note.

3. Behavior. "Few would argue that music instruction is most suited to direct experience with active, purposeful participation. It is of little use to have students passively take notes about a musical experience when they could be personally engaged in the experience," T3 stated. Three behaviors are needed in a well-balanced music program: performing, describing,

and creating. In order to make music along and with others, students should be able to sing in tune and with expression and also play simple instruments and accompaniments. Students should have opportunities to describe music they hear through movement, through visual representation of the sound source ("make a map of the sound you hear"), and through verbal description. Students would apply understandings and skills in a creative endeavor as they improvise music or compose works which are intended to be performed again.

4. Learner's experience with musical context. T3 explained: "As teachers, we must ask how students are representing their understandings in order to determine effectiveness of instruction." Music does not lend itself well to standard means of evaluation (tests, paper/pencil measures, etc.). "Instead, the teacher must look to certain stages demonstrated by the learner for guidance in designing instruction to meet individual needs." T3 then outlined three stages based on the experience of the learner (apparently drawing from the ideas of Jerome Bruner):

> 1. In the inactive stage, the learner demonstrates understanding by "acting out." The learner may perform that which has been heard several times, having learned the piece by ear. The learner clearly has some knowledge and understanding of the music, but may not be able to articulate this understanding.
>
> 2. In the iconic stage, the learner forms a mental representation of the concept and begins to internalize pattern, expectations, and regularities in the music.
>
> 3. In the symbolic stage, the learner makes use of symbols and verbal terms which stand for the music but are not the music itself. This stage of abstraction can only be meaningful after the first two stages have occurred. If symbols have been learned without reference to sound, they have little meaning in a musical context. "An emphasis on symbol without the prerequisite understanding of sound has been the downfall of many a program."

5. Related to teacher/student cognition, T3 recommended that instruction be designed so that learners have opportunities to use skills and processes to acquire musical information, process it to show new relationships, and use that knowledge to acquire still more understanding.

"Teachers provide for student thinking as they select and use instructional strategies which warrant higher-order thinking, e.g., posing problems to be solved, juxtaposing materials for analysis, encouraging the development of evaluative criteria, etc." T3 argued that teachers and students also give attention to metacognitive processes--knowledge of oneself as a learner and knowledge and control of the process. "Students might be asked to monitor and guide thinking before, during, and after learning tasks so that a sense of direction and intent pervades the learning experience."

6. Disposition toward music. Music educators have long held the view of music education as aesthetic education--that perception of a musical work and the reaction to its expressive qualitites constitutes an aesthetic experience and that perception especially can be aided by instruction, T3 suggested. As a student gains understanding, which in turn deepens the aesthetic response to music, that student will increasingly value music as a form of human knowing. This disposition will lead the student to further experiences, sensing the power and potential of music as an artistic form of expression. However, T3 felt that developing these dispositions is less a function of explicit instruction than it is

> a natural concomitant to a curriculum rich in quality music and active participation in music. The student who feels and thinks "like a musician" as he/she is engaged in performing, describing, and creating within the classroom will develop a disposition towards music.

The teacher's task is to orchestrate the environment and select works which will make it likely that positive dispositions flourish.

Comparison of teachers' comments about key features. All of the teachers agreed with the key features of an ideal curriculum. T1 zeroed in on the need for connecting content and organizing it coherently and was the only teacher to raise the contextual issue of the time typically allocated to music which seriously impinges upon teaching for understanding. T2 stressed the need for depth over breadth and meaningful applications in particular and also mentioned another contextual constraint: subject-matter isolation and fragmentation in the elementary school curriculum. T3 qualified the key features with extensive comments pertaining specifically to the features of a music curriculum, distinguishing music from other disciplinary areas.

All of the teachers addressed issues related to organization and sequencing and the need for a spiral or "mastery" curriculum where knowledge and skills can be built coherently from one grade level to the next. All of the teachers identified content selection (representative, quality musical works) as a key feature of an ideal curriculum. All of the teachers mentioned developing students' tastes and abilities to discern and make informed judgments about music. T2 and T3 referred more to students' musical independence, real-life applications, and relevance as primary features or goals of ideal curricula than did T1. T2 and T3 included dispositions and enjoyment in their discussion of key features, while T1 did not. Enjoyment seems to be of primary interest to T2. T3 qualified how positive dispositions are developed: as a natural effect or by-product of a curriculum rich in quality music, quality encounters, and active student participation--not as a separate or isolated goal of instruction.

T2 and T3 acknowledged individual student differences, while T1 did so only in terms of "mastery" by grade level. T1 did not address the need to provide students with diverse experiences in music, but T2 and T3 mentioned this as a key feature (creating, performing, and composing). While T2 discussed the need for higher order thinking and multiple applications, only T3 discussed the need for metacognition, understanding the thinking of teachers as well as students, and diverse forms of evaluation to assess what students understand. T3 seems to view musical concepts differently than T1 and T2. T3's definition of concepts seems more encompassing. T1 seems to define music as elements and skills to be mastered; T2, as elements, experiences, and enjoyment; and T3, as a serious subject of study and diverse experiences. T3 suggests that music is study in sound--not knowledge about music.

Teachers' Responses to the Goals Presented

Goal 1

Goal 1 was to *develop an understanding of how musical elements and symbols (pitch, rhythm) are selected, organized, and presented by composers and musicians to communicate meaning.* What important understandings or generalizations should be developed if this goal is to be accomplished?

T1 stated that a central understanding of music elements should include rhythm, melody, harmony, and form. Further, the "components" of these elements should be taught sequentially, but what these components are, were not made clear.

T2 suggested that, in order for students to develop an understanding of why composers use the different elements of music to communicate meaning, they must learn what the elements are and "how they contribute to the composition to make it a vehicle for the listeners' understanding and enjoyment." Elements listed by T2 were pitch, duration/rhythm, tone color, dynamics, tempo, texture, form, and style. Under each of these were descriptions of what these elements entail. Under form, for example, T2 included "recognize and identify how form in music is important to communicate meaning. Study AB, ABA, rondo form, and theme and variations, plus program music. Study the functions of introductions and interludes and codas in a composition." Under style, T2 had "compare contemporary, Baroque, Renaissance, and classical music. How are they alike and different? Recognize how ethnic, jazz, rock, country, blues, folk, ballads, classical, and contemporary styles each communicate musical meaning." T2 did not expand upon the "meanings" that could be communicated, and T1 did not address this portion of Goal 1 at all--"communication" also a trouble spot for the professors.

T3 stated that Goal 1 must be generally about addressing the acquisition of conceptual knowledge, "especially that knowledge which pertains to the elements or 'building blocks' of the music." However, T3 cautioned that "these concepts are based in sound and reflect relationships in sound. Symbols serve as referents for the sound and hold little meaning apart from that reference." Thus, T3 would rewrite the goal, excluding any mention of symbols. "Students need to acquire understanding of the elements of sound and the way those elements are organized in music."

With the above caveat, T3 listed several concepts worthy of attention under this goal, although "a complete listing of concepts to be acquired could be the subject of another paper." T3 attempted to list "broad and inclusive concepts, each of which could be broken down into smaller segments as the focus of instruction." T3 listed melody, rhythm, timbre, dynamics, articulation (a series of sounds may move from one to the next in either a smoothly connected or a detached manner), harmony, texture, form, expression, and style. T3 briefly defined each of these concepts or elements. For example, "form"--a musical whole may be made up of same, varied, or contrasting segments; and "style"--the way musical elements are combined into a whole reflects the origin of the music.

Comparison of key understandings for Goal 1. T1 submitted four elements in music: rhythm, melody, harmony, and form. Melody and harmony actually are two highly related concepts, whereas the others are quite different. T1 does not define these elements nor elaborate on them, but stresses strict sequencing of these for teaching/learning. T2 listed eight elements to be studied to "contribute to the listeners' understanding and enjoyment." (See chart, below.) Most of T2's concepts are distinct categories. T3 stressed that "symbols" (mentioned in the goal statement) serve as referents for sound and hold little meaning apart from that reference. This matches T3's earlier definition of music. T3 listed 10 elements, all of which appear to be somewhat inclusive categories. Further, T3's explication and examples of elements are stated as principles, while most of T2's comments are rather vague. For example, for "style," T3 wrote: "The way musical elements are combined into a whole reflects the origin of the music."

The teachers' listed elements or "building blocks" to understanding music can be charted as follows:

T1	T2	T3
rhythm	duration/rhythm	rhythm
melody	pitch	melody
harmony	tone color	timbre
form	form	harmony
	dynamics	dynamics
	tempo	articulation
	texture	texture
	style	style
		form
		expression

While "communicate meaning" was included in Goal 1, only T2 addressed it, but did not explain how this is accomplished by learning the elements of music or what can be communicated. Thus far, T1 seems to view knowledge as received, while the views of T2 and T3 seem more reflexive. Given T3's previous discussion under key features and assertions about conceptual understanding and what understanding music is, T3 seems more constructivist in orientation than T1 or T2.

Teachers' Perceptions of Relationships Among the Key Ideas of Goal 1

Experts were asked what kinds of relationships exist among the key understandings they listed for this first goal. For example, do all the key ideas fit together into a single network? Are two or more of them linked through cause/effect, rule/example, whole/part, or other logical relationships? Do some of the ideas form natural sequences along some common dimension?

T1 responded by stating that the relationship among these central understandings is that they fit together into a single network and are all utilized simultaneously. "One note will have rhythmic duration, pitch, harmonic placement, and will be a part of the total form of a composition." A skill cannot be isolated and taught by itself. Yet, T1 stated that each skill (understanding of individual elements) must be mastered before moving to the next one because the next skill depends upon mastery and understanding of the previous skill. "The teacher guides the students from the known to the unknown." T1 defined understanding of musical elements as "skills."

T2 recommended that the elements of music be explored and taught through performing, analyzing, composing/improvising, relating the arts to "the basics," and in forming attitudes about music "which will be positive and helpful to the student's future taste in music." T2 stated that his/her school's curriculum was designed to reflect all of these dimensions and that their adopted music textbook series reflected these goals as well (Music, Meske, Andress, Pautz, & Willman, 1988).

T3 gave an example of how elements or key concepts in music are related by defining expression: "Expressiveness is affected by the way all of the various elements combine to produce the musical whole." A more specific example was given to underscore this interrelationship, which T3 said varies according to the composition studied. In listening to the "Allegretto" from Beethoven's Seventh Symphony, students might focus on certain elements in successive hearings, but always in relationship to the way the elements work together. For example, the simple rhythmic relationships of the main theme might be read by the students, the relatively static nature of the melody might be underscored as they play it on barred instruments, the form might be derived as they determine that the theme is stated four times, harmony and texture highlighted as they identify the countermelody which acts as embellishment to the theme, and timbre discussed as the theme is played by various groups of instruments. "This experience with the interrelationship of various elements might serve as the impetus for a creative exercise in which the students manipulate given themes in similar ways to produce a satisfying musical whole." T3 summarized this section by arguing that the curriculum should "provide for the exploration of the richness in a musical work by highlighting these relationships rather than examining . . . musical elements in isolation."

Comparison of relationships of key ideas for Goal 1. All of the teachers focus on the elements as the primary interest in Goal 1. T1 and T3 discuss how the elements of music are interrelated and work together in any piece of music and ought not be studied in isolation of one another. T1 defines understanding of the elements as "skills," nevertheless, and perceives developing these understandings as tightly sequential. T2 interprets "relationships" more broadly to include diverse activities such as "relating the arts to the basics" or other subject areas in the school curriculum and does not explain the nature of these relationships or the criteria for making meaningful interdisciplinary connections. T2 also refers to students' dispositions again, while T1 and T3 ignore this in their response. While we do not yet know how T2 would treat this network of simultaneously occurring elements, we know that T3 would use the same piece of music to explore its many features and how the elements are organized and function together as a coherent whole, rather than move from one piece of music to the next to explore these relationships. Like T2, T3 suggests more than one strategy for analyzing the relationships.

Organizing and Presenting Key Ideas in Goal 1 to Students

When asked how they would organize the key understandings and generalizations related to this goal for presentation to students, the teacher experts responded as follows.

T1 stated that the organization of "component skills must be very orderly," referring to this as a "master sequence." Whatever is presented in a new lesson must build upon previous lessons and understandings. For example, in Grade 1 under the rhythm concept, T1 would have taught students to identify, sing, play, and write a quarter note (or beat), a quarter rest (no sound), and two eighth notes. In Grade 2, and with the above prior knowledge, students would learn the half note and half rest, and the whole note and whole rest. Under the concept of form, Grade 1 students would learn to identify similar and different tunes and rhythmic patterns; improvise four beats of a melody (given a tonal "question," the student writes a tonal answer); and identify repeats. In Grade 2 under form, students would identify similar and different phrases, repeats, rounds, and rondo form.

T2 provided several alternatives to organizing key understandings. First, "it would be logical to use a theme which students could relate to." Then, one would organize the lessons "with the elements of music as the focus." Songs and materials would relate to the theme while students learned how the elements of music are used by composers. The example provided by T2 reflects a strong interest in correlating school subjects:

> In fifth grade, the emphasis is American history. Use that theme for learning the elements of music through songs of America through history. This could also be correlated through artwork or by the period in history to be studied. Studying the music in history is like a blueprint of what has happened. Songs are the newspapers of the times.

T3 argued that the sequence of presentation of concepts is less linear in music than it might be in some other content areas. "Certainly, one cannot say that students must demonstrate understanding of melodic concepts before progressing to rhythmic concepts." T3 suggested that many times the development of understanding progresses in successive encounters as the students first deal with examples of obvious contrasts which demonstrate the concept and later encounter examples of greater subtlety combined with other elements. "There are some understandings which seem to precede others, however." T3 offered the example of many students who enter school with the ability to discriminate varied dynamic levels (loud-soft) or to recognize differences in the timbre of common instruments. "However, the use of dynamic subtleties to enhance performance seems to develop later and can be assisted by careful modeling." Another example provided by T3 was the interrelationship of harmony and melody. "It makes sense that students explore the workings of melodies before they can appreciate the complexity of multiple, simultaneous melodies in polyphonic music and the harmony which results from the stacking of melodies." In sum, sequence of presentation would vary, depending on the length and complexity of the musical example, the number of simultaneous dimensions which serve as the focus, and the stage of knowledge representation of the learners (Bruner's developmental stages, presented earlier).

Comparison of views about organizing/presenting key ideas. T1 proposed a tight, linear sequence that seems to present elements in isolation of one another and at a low level of complexity. T1 also emphasized reading notation early on, whereas T3 would not attend to reading formal notation until the later grades. Also, T3 stressed other forms of representation (inactive, iconic) before symbolic representation. Most of what T1 would have students do is "identify" notes, repeats, and so forth, which would not seem to engage students in critical thinking or serious analytical work. Nor would this approach support T1's own claim (made earlier) that musical elements cannot be understood in isolation.

T2's primary concern relates to student relevance and subject-matter correlation. T2 chooses a broad thematic approach to music while considering the social context of the school and potential connections across disciplines. T3, however, sticks to the business of music using a disciplinary, constructivist approach with attention to what students are likely to understand well, even if they cannot "perform" this understanding. T1's organizational thrust is rather behaviorist in orientation. Both T2 and T3 reveal sensitivity to students' needs and development, while T1 seems to ignore the issue of student diversity within any given group or grade level. Unlike the professors' notions of organizing key ideas, the teachers address this question more in terms of organizing concepts and content rather than generic instructional phases or lesson segments.

Teachers' Sample Lesson Plans for Goal 1

Teacher experts were asked to propose/design specific lesson plans for Grades 2 and 5 to develop one of the key ideas they listed in the previous section for Goal 1.

The primary objective of T1's sample lesson for Grade 2 (to develop an understanding of how musical elements and symbols are selected, organized, and presented by composers and musicians to communicate meaning) was to identify meter of 4. Prior knowledge required of students would be the ability to identify strong and weak beats and identify, sing, and play a quarter note, quarter rest, eighth notes, half note, half rest, whole note, and whole rest. The teacher would put the words of "Mary Had a Little Lamb" on the board, and students would "write the rhythm of the words." The teacher would guide students in identifying the strong and weak beats, placing an X under each strong beat. Then, a bar line would be placed before each X forming a "box called a measure." Students then would count the number of beats in each measure (4). At the beginning of the song, the teacher would write "4" over an inverted quarter note (signifying what kind of note gets one beat). Students then would be taught a 4-beat conductor's pattern. To reinforce this learning, students would find songs in the meter of 4 in their music books and then would sing and conduct several songs in the meter of 4. For evaluation, T1 would have students take a written test (identify meter of 4), write measures of music in meter of 4, or conduct in meter of 4.

For Grade 5, T1 chose the same objective, only this time identifying meter in 6/8. Preparatory understandings of 6/8 meter would rely on understanding 3/4 meter. Using the song "Red Iron Ore," the teacher would have students engage in the same sorts of activities they did in Grade 2, with the teacher explaining that the "song is more musical in 6 rather than 3," with strong and weak beats as factors. An eighth note becomes the beat. In both of T1's sample lessons, there are no references to decisions composers/musicians make or the meanings communicated by these decisions and/or effects (suggested in Goal 1).

T2 presented a Grade 5 lesson built around "The Star-Spangled Banner." Her goal was to help students "be aware of the historical background of the writing of the words to the national anthem." Her music objective was for students to recognize rhythm patterns that are the same. In setting the stage for the lesson, T2 would have students sing the song "in the correct manner of respect," discussing "the proper way to stand." The teacher would discuss the historical circumstances surrounding the writing of "The Star-Spangled Banner" by Francis Scott Key. Materials included would be books on the story of the song and a picture of the actual flag flown at Fort McHenry.

T2's learning strategies emphasized "ordering of events and mental imagery." The teacher would ask students to listen and imagine that they are on the ship with Francis Scott Key as they listen to the story told or read by the teacher or students. Next, T2 would have one student actually pace off the size of the 30 x 40 foot flag to show how large the actual flag was. "This is important because the sighting of the large flag was the inspiration for Key to write the words." Then the whole class would read the words of the national anthem aloud as if they were "telling an exciting event on a live TV news broadcast." Students then would stand and sing two to three verses as if they were the people celebrating the victory of Ft. McHenry. T2 would have students look at the music and identify the identical uneven rhythm patterns. Finally, the teacher would ask students to guess what other song has the same rhythmic patterns as the first six notes of "The Star-Spangled Banner" by clapping the rhythm. ("Happy Birthday" has the same rhythm pattern.)

As follow-up lessons, T2 would use the song to teach melody line, musical form, "proper vocal technique to be able to sing the wide melodic range," time signature, and conducting in meter of 3. Lesson correlations or extensions for students to work outside of class for extra credit would include the following kinds of activities: writing their own words to the national anthem using the same melody; writing their own words and music for a new national anthem; researching a short report on different American flags (written, oral, or both); designing a flag for the United States; or bringing other books that relate to the time in history during the attack on Ft. Henry. Classroom teachers would be encouraged to have students write about the historical events during the school day, and students would receive credit for music class as well as their other studies. T2 stated that this same lesson "can be used for second grade. The follow-up lessons would be more on their level." What the difference by level would be was neither described nor further explicated than this.

T3 chose "form" as the focus of both Grade 2 and Grade 5 lessons, stating the concept related to form as "A musical whole may be made up of same, varied or contrasting segments." T3's overall instructional plan would reflect developing this idea "through various levels of knowledge representation." For the inactive stage, T3 would ask students to demonstrate their understanding of same/different by performing (playing or singing) songs with same and different phrases and by describing with movement the organization of phrases in a song.

In the iconic stage, T3 would ask students to describe the form of a musical piece by using geometric shapes which represent the phrases (circle and square for an A phrase followed by a B phrase; circle, circle, square, circle for AABA phrases, etc.). Students might also describe the structure by arranging pictures of the way the rhythm and melody look (iconic representations) in the correct order. In addition, they might be asked to create an improvisation or composition which shows a pattern of like and different phrases.

Under the symbolic stage, students could demonstrate understanding of form related to notation as they preview a piece of music before performing to determine its structure. They also could arrange notated phrases in a correct order to match the form of the piece. A proposed sequence of difficulty could be developed through musical examples that demonstrate the following: only one contrast in phrases (AB, AABA, etc.); only one contrast in larger groupings, such as sections rather than phrases (AB, ABA, AABA); more than one contrast in phrases (ABCA, ABCD); and more than one contrast in sections (ABACA). T3 cautioned that the teacher would not develop a "unit" of these different levels on form, but that these understandings would be developed throughout the year in successive experiences highlighting form.

T3 suggested that the musical selection for this lesson could be the spiritual "All Night, All Day." Students would describe the form of the music by choosing geometric shapes to represent phrases. Students then would create a movement sequence to parallel this structure. T3 anticipated prerequisite understandings: Students will need to figure out the form based on the characteristics of the melody and the rhythm. Understandings of melodic contour and duration would be necessary. The teacher would present the song so that students have an opportunity to hear the musical whole. The teacher would then display a shape to represent the first phrase of the song and ask student to choose the next shape to show the following phrase as same or different. Through successive hearings, the form would be represented, followed by another entire hearing to confirm choices. The class would be invited to sing the entire song as the teacher listens to verify that students know the song. After the group activity of hearing the song and "figuring out the 'puzzle' of the structure," students would be invited to create a movement sequence to correspond to the plan of the phrases: ABACDBDC. Students might work in small groups to create and practice their plan before performing for the rest of the class. Notice that this sequence does not follow T3's previous guidelines for sequencing developmentally (movement, nonmusical symbols, and symbolic representation in music).

Additional experiences in T3's Grade 2 lesson would include verifying the form with the notation provided in a pupil book or creating a composition with similar structure on classroom instruments. The teacher provides the musical example, sets the idea of phrases corresponding to shapes, and suggests the movement activity. Teacher-student discourse would be characterized by questioning as each phrase is compared with the previous phrase, and opportunities for students to verify ("How could we check our answer?"), with an additional "whole" listening or checking the notated score. Student-student discourse would be evident as students planned their movement sequence to reflect the form. The teacher would evaluate by monitoring student responses to the puzzle and observing as students performed their movement sequences.

T3's Grade 5 lesson used the same "form" concept. Learning would build upon understandings such as those reflected in the Grade 2 lesson under "sequence of difficulty" and also include additional, more complex levels of understanding such as: examples which have slightly varied sections as well as clearly defined contrasting sections; examples with longer and more varied plans (rondo form as ABABA, ABACA, ABACADA); theme and variation in which different treatments of a theme alter the repetitions while retaining the identity of the theme; and other forms often identified with particular style periods in music (sonata, allegro, fugue, etc.).

The instructional sequence of T3's Grade 5 lesson would be the same as in Grade 2, "reflecting a progression through the modes of knowledge representation." During the inactive stage, first exposures to a particular form might require students to demonstrate their perception of the form by "remain seated when you hear the A section; stand up when you hear B; turn around if you hear C," and so forth. During the iconic stage, activities would be similar to those outlined in Grade 2 as students hear alternate forms and represent these graphically. For the symbolic stage, T3 added, "As students demonstrate increasing facility with musical notation and terminology, they would function more frequently at that level, examining scores for repeated themes, notating their own composed ideas."

In T3's Grade 5 lesson, students would create and notate a composition in rondo form to be performed on classroom instruments. T3 identified the following prerequisite understandings:

> In order to create this piece, students will need a repertoire of musical devices which they can draw from to create same and different sections. They need to know that rondo form can be expressed in a variety of ways as long as the A section recurs every other time (an understanding accomplished through repeated exposure to a variety of examples).

The teacher would begin by having students listen to a Mozart horn concerto and the form Mozart used (ABACADA1) while listening to the piece. The teacher would than ask, "Why would Mozart change the A section the very last time?" Students would discuss possible reasons (to emphasize finality, to heighten interest after many repetitions of A, etc.).

Students then would be asked to create their own rondo using classroom instruments and working in small groups. They would be encouraged to develop a plan and then to monitor their work as they organized their ideas, chose from alternatives, practiced their compositions, and performed for the class. "Ensuing discussion could center around choices of elements used for contrast, overall structure, and perhaps use of slightly altered sections for emphasis by some students," T3 said. The teacher would evaluate students' understanding by viewing both process in small-group work and product in the final performance in class. In addition, "discussion of the works would reveal thinking used to analyze and shape the compositions."

Comparison of teachers' lesson plans. T1's lessons seem sparse, shallow, and fairly unimaginative compared to those of T2 and T3. Most activities are teacher-centered, requiring low-level responses from students. While students would be engaged in several activities such as conducting, searching for songs in the songbook that have a meter of 4, and singing, the quality of these activities as described do not seem very challenging or engaging. There is little difference between T1's Grade 2 and 5 lessons in terms of challenge, activities, or increasingly complex ideas.

T2's lessons are extensive and interesting, but focus more on social studies than music. However, there are several kinds of activities that students might find engaging and challenging, both in a whole-group setting and in independent research. Like T1, T2 suggests that this lesson would work as well in Grade 2 as Grade 5, but it would have to be refashioned "more on their [Grade 2's] level." T2 does not explain what this revision would entail in terms of teaching and learning. For Grade 2, T2 ignores the expanding horizons approach to curriculum organization in social studies (supported earlier in a rationale for correlating subject areas in the first place). For example, in Grade 2 social studies, do students typically study American history, particulary battles? Secondly, T2 does not question this arbitrary organization of social studies content for Grade 5. T2 also ignores any method of evaluation other than awarding "extra credit" to students in the regular classroom and in music for their independent efforts and interest.

Compared to T1 and T2, T3's lessons are articulated extremely well in terms of developing students' depth of understanding in music. T3 demonstrates how the same concept can be presented in two grade levels by differentiating the complexity of the concepts. T3 pays careful attention to students' prior knowledge, has several alternative strategies in mind for developing students' understanding in each segment of a lesson and in follow-up lessons toward greater complexity, and involves students explicitly in analytical and evaluative musical discourse about their learning. T3 also includes small-group work for student composition and performance. Both T1 and T3 ask students to explore and identify what they are learning in music textbooks (notated examples), but how students would arrive at a point to be able to do this under the tutelage of these teachers would be dramatically different.

Goal 2

Goal 2 presented to the experts was to *develop an understanding of the artistic process in composition or performance to create musical forms with expressive intent (choices, decision making, critical/creative thinking).* Teacher experts again were asked what important understandings or generalizations should be developed with students to achieve this goal.

T1 stated that "drawing from the skills learned in the master sequence, the students are guided in writing lessons and improvisations in singing, writing, and playing instruments." These improvisations are the beginning of composing or music writing and incorporate the same techniques used by professional composers, T1 added. Students would choose rhythms and intervals they think will sound good in the improvisations. For decision making, T1 suggested that "given a portion of the melody and rhythm, the students 'create' the remainder; or, given the form and words, the students create the rhythm and melody."

T2 responded by stating, "to understand the artistic process in composition and performance students must actually experience the process." T2 then described how opera can be used as a vehicle to teach creative story writing, composition of libretto and melody, and presentation of the finished product (opera) with costumes, make-up, or puppets. This interrelated project requires students to follow sequential stages in the process of creating an opera. "The product/performance is an important factor because it gives the students an opportunity to bring the process to a conclusion which can be evaluated by themselves as well as their parents, teachers, and peers." T2 has used this sort of comprehensive unit with primary grades as well as upper elementary.

T3 submitted the following central understandings related to Goal 2:

> Musical elements can be combined to form an expressive whole.

> Composers make musical decisions using elements as tools to create expressive works.
>
> Musical elements can contribute to expressive outcomes such as expectation/resolution; establishment of mood, etc.
>
> Some musical forms suggest certain types of musical choices to a composer.
>
> The composer views the work with evaluative criteria in mind.
>
> Composers use different means to preserve their work--notation, electronic formats, etc.
>
> Performers interpret a composer's intent.
>
> Performers vary in interpretation of a composer's work.

Teachers' Perceptions of Relationships Among the Key Ideas of Goal 2

Again, teachers were asked what kinds of relationships exist among the key understandings listed for the second goal. Do all the key ideas fit together into a single network? Are two or more of them linked through cause/effect, rule/example, whole/part, or other logical relationships? Do some of the ideas form natural sequences along some common dimension?

T1 stated that by improvising "and thus composing, the students demonstrate rudimentary understanding of the relationship between what they have learned in the master sequence and the elements composers use to write and performers use to read music." T2 did not treat this question separately but rather submitted a unit on writing an opera, which will be described in more detail under sample lesson plans that follow.

T3 claimed that any discussion of the artistic process must be grounded in understanding the conceptual foundation outlined in this expert's response to key features. Examination of a composer's output must necessarily answer the question, "How did the composer choose and organize the sound?" In addition, students can address why particular choices suggest certain effects (i.e., a gradual increase in tempo and dynamics toward the climatic ending of a piece, suggesting a feeling of anticipation and excitement). T3 added another understanding,

> especially as students create their own works, is the cycle of generating ideas and filtering out inappropriate ideas in a creative and critical context. This would suggest almost a

> symbiotic relationship between exploring new ideas and preserving worthy ones.

Another set of relationships worthy of attention under Goal 2 for T3 would be emphasizing the relationship or "triad of composer/performer/listener."

Organizing Key Ideas in Goal 2 for Presentation to Students

When asked how they would organize the key understandings and generalizations related to this goal for presentation to students, the teacher experts responded as follows.

T1 responded with two items. One should be ear training ("write what you hear") using short melodic and rhythmic patterns played by the teacher. Another should be writing. For example, the teacher would play a short melodic fragment and students would make up an ending to it in 4-8 beats duration. T2 did not treat this question separately but rather submitted a unit on writing opera which will be described in more detail under sample lesson plans that follow.

T3 stated that the best way to present these generalizations would be through the use of models. "The artistic process is varied enough that I'm not sure a sequence of generalizations would be appropriate, but instead as students encounter various examples, topics relating to the artistic process would arise." Three possibilities were posed by T3: musical models, real-life or "people" models, and creative applications in the classroom. An examination of musical models was illustrated with the previous example of Mozart's horn concerto. The following question posed might lead students to speculate or infer possible decisions: "Why would a composer alter the last A section slightly?" Presentation of "real life" (people) models would involve artist-in-residence programs or videotaped interviews with composers discussing their work, which might serve as "windows to the artistic process, a chance to probe the mind of the composer." Applications in the classroom could be illustrated in creative activities that occur in large group mediated by the teacher, in small groups, or in individual settings, giving students a chance to create, evaluate, and discuss the process with others. "The teacher's choice of materials might facilitate this discussion, for example, assigning the same theme to all and then comparing treatments of the same theme would provide a forum for artistic ideas." Thus, musical discourse featured centrally in T3's notions about presenting ideas related to the creative process and decisions made by composers and performers. Discourse made individuals' ideas and thought processes public and visible.

Teachers' Sample Lesson Plans for Goal 2

Experts were asked to propose/design specific lesson plans for Grades 2 and 5 to develop one of the key ideas they listed in the previous section for Goal 2.

T1's objective for a Grade 2 lesson was as follows: "The students will improvise or compose 8 beats of music as a conclusion to 8 beats of music presented by the teacher." First, the students would review "the essential elements" they must already know in order to complete the improvisation. The teacher would "dictate" by tapping or playing an 8-beat rhythm, and students would "supply the remaining 8 beats (answer) using the rhythms just reviewed." For reinforcement, T1 would ask students to sing or play their 8-beat improvisations, and provide similar drills for practice. For evaluation, the teacher could check the students' writing lessons to be sure that students have used the correct number of beats to complete the improvisation.

For Grade 5, T1 selected the following objective: "Students will improvise or compose 12 beats of music in the meter of 6 as a conclusion to three phrases of music or a poem in the meter of 6." Given a poem in the meter of 6, students would write the rhythm of the words. The teacher would provide three phrases of a poem in a meter of 6 and guide students in writing the rhythm of the words. The improvisations would be played by students on classroom instruments or sung, and additional drills could be presented. Evaluation would be the same as in Grade 2. For T1, there is no student discussion in either of the lesson examples related to "expressive intent" in Goal 2. Intention is more teacher-driven than student/composer-driven. While student improvisations require decisions and creative responses within parameters, seemingly the improvisations and their different, potential effects are not discussed with students.

T2 submitted sample lesson plans from a successful unit developed on opera. This will be described at length because it illustrates T2's rationale/theory about music instruction concretely. In Lesson 1, the primary focus is developing characters for a story. Students would explore the notion that stories need interesting characters who all have "unique traits in looks and personalities." First, students would discuss familiar characters in books, plays, fairy tales, or television and then discuss why these characters are so appealing to them. Then they would be asked to create an original character to put into a story. Students would make paper bag puppets, focusing on outstanding features and traits of their characters. They then would write descriptions of the characters they have created, talk abut them, and imagine/discuss how the characters created could fit together to make an exciting story. "How many characters would they use? Who would be the villains, heroes, and victims?"

Lesson 2 of T2's opera unit would involve students in writing a story draft (libretto) using student-made puppet characters. One concept for students to understand would be that stories can be developed by choosing the characters before the story line, T2 suggested. This lesson would focus on grouping characters, chronology, and developing relationships between the characters in the story. Students would explore the setting of the story, create a conflict or problem that has to be resolved, determine how the problem might be resolved by the characters, and decide if they want a happy or sad ending. Students then would suggest how their puppet characters might fit into this developing plot. These suggestions would be recorded on the board or on audiotape for students' future reference and use in subsequent lessons.

Lesson 3 would focus on organizing the story or scenes into a logical order to create a drama by writing synopses for each scene. Students also might work in small groups to develop their scenes and return to whole group to discuss, evaluate, and modify in terms of the scene's fit with the developing story plot. During this lesson, students also would be shown a filmed or videotaped selection from an opera, operetta, or play.

In Lesson 4, students would be taught how dialogue is sung in several ways in opera and their functions: aria, recitative, small ensemble, and chorus. Thus, the purpose of this lesson is to identify where arias, recitatives, and choruses will be included in the students' opera. They also might be shown a sample tape which highlights these forms. (T2 suggested Amahl and the Night Visitors by Menotti.) Each of these forms is explained to students to help them understand their functions in an opera or story. Students review the scenes they have developed and decide what form of song could be used in each scene, who will sing it, and what those characters will be trying to convey to the audience and other characters in the story.

Lesson 5 would focus on writing the libretto (words) to the arias, recitatives, ensembles, and choruses. The teacher would introduce this lesson by singing recitative to the students (asking questions, musically) and having them reply musically. T2 suggested playing a chord on the piano and letting the students improvise recitative replies to these "everyday questions," or questions related to how students are coming along on the project. T2 said that students must get used to the idea that there will be no spoken words in the opera they are writing. This would be followed by examples of recitatives from The Marriage of Figaro and students deciding on musical forms for each of their songs (ABA, theme and variations), and whether these forms will require rhymed or unrhymed text and/or poetry. This lesson would be repeated until all lyrics (the libretto) had been written.

The following lessons would focus on students composing the music for the libretto while attending to the meaning of the words and parts, and choosing appropriate rhythmic and melodic patterns to fit the forms (AB, ABA, theme and variations) which students developed and decided upon earlier. This musical material would be notated with the assistance of the teacher and also tape recorded as it developed.

T3's lesson for Grade 2 focused on the following generalization: Composers make decisions using elements as tools to create expressive works. T3 would organize experiences to develop this understanding by using rich compositions as subjects for study. Some possibilities would include using works with varied moods such as Saint-Saens' Carnival of the Animals. "As students become familiar with individual pieces, discussion could focus on questions such as, 'What did the composer decide to do with the music to make it sound swanlike?' or 'Why was Saint-Saens' idea for the tortoise a good one for that animal?'" In each case, students would be encouraged to cite what happens in the music to create that mood. Also, works with repeated treatment of the same theme could be used, such as Ives' "Variations on America" or Mozart's variations on "Twinkle, Twinkle, Little Star." After students realize that the theme is transformed each time by the composer, the decisions made and their effects or consequences can be highlighted and discussed.

In the Grade 2 lesson, T3 would have students determine how a composer might vary a theme which is repeated many times in order to maintain interest. The students would describe decisions made and make similar decisions to create interest in a piece the class would perform. T3 alluded to the following prerequisite understandings: Students would need to be able to verbalize and visually describe what is happening in the music according to the elements present. The teacher would lead the class in performing some well-known tune such as "Hot Cross Buns" a number of times--asking students to count the repetitions along the way.

Then T3 would play Grieg's In the Hall of the Mountain King, leading the class in tapping the repeated rhythmic pattern on their palms. Students would follow an iconic representation of that rhythmic pattern in books or on a chart. Students subsequently might be asked to sing the melody on a neutral syllable or to step the pattern of the rhythm across the floor. "After chaos subsides (which it usually does as the tempo and dynamics build to the ending), the teacher will ask how the composer was able to repeat the melody 18 times but still make it interesting for the listener," said T3. Students would describe gradually higher register, louder dynamics, faster tempo, thicker texture, and so forth. The teacher then would pose the question: "Could we repeat 'Hot Cross Buns' many times but build excitement as Grieg did?" Students would offer suggestions, and the class would experiment and discuss the effects of their decisions. T3 added that in this lesson "the teacher takes a rather direct role in assisting the students to gain familiarity with the work, asking questions to focus discussion, and collecting ideas from the treatments suggested by the students."

For Grade 5, T3 thought of several possibilities for developing students' understanding of the artistic process. Students could examine a composer's treatment of the same theme in varied ways (Copland's incorporation of "Simple Gifts" in Appalachian Spring). Students could examine how different composers treated the same theme (folk songs or arrangements of melodies such as "Battle Hymn of the Republic"). Or, students could examine alternate performances of the same work (different recordings of the same work by different conductors and performers).

As the objective of this lesson, T3 chose having the students compare settings of a familiar tune to determine differences in the way composers choose to set the melody. For prerequisite experience, T3 assumed that students could already perform the melody of "Greensleeves" and that as fifth graders, students have gained greater facility in describing music using generally understood terms and greater independence working in small groups and alone. The class would begin by singing "Greensleeves," perhaps with student volunteers to accompany on autoharp or guitar. The teacher would provide a series of questions to serve as a frame for analysis as students work in small groups after they listen to each one of the following settings: "Greensleeves" set in the original style of the Renaissance with lute, recorder, and viola da gamba accompaniment; "Fantasia on 'Greensleeves'" by Ralph Vaughn Williams (an orchestral setting); and "Greensleeves" arranged and performed by the Ramsey Lewis Trio (a jazz rendition).

The teacher then would ask students the following questions: "How would you describe the character of this setting?" "What elements has the composer/arranger chosen to suggest this mood or character?" "Do you think these choices were good ones? Why?" "What ideas could you borrow for use in your own compositions?" Responses to these questions could be submitted in written form as an assignment, but T3 would "choose to spend class time to share ideas in a profitable exchange." A natural extension of this lesson would include an opportunity for students to arrange a class or individual "setting" of the tune. Students also would be encouraged to bring additional examples of "Greensleeves" settings to class.

Comparison of teachers' lesson plans. T1's lessons starkly contrast with those of T2 and T3. First, it is obvious that T2 and T3 devise activities that would extend over several lessons or classes in a coherent unit. Their lessons are not individual, microscopic extrapolations from larger fragmented goals but embodiments of larger related goals linked over time. T2 and T3 also seem to have a more comprehensive view of student development than does T1. For example, T2 does not underestimate what second graders can understand or do with respect to learning about opera or integrating their efforts across subject areas. T3 also seems sensitive to differences in students' abilities and interests by age by addressing form and style in Grades 2 and 5, respectively, and carefully selecting the musical literature to be used for students' analysis at each grade level. At both grade levels, the music would be appealing to students. T1's 8- or 12-beat student improvisations pale against what students would be learning about the artistic process and improvisation in the classes of T2 and T3. T2 and T3 use a more inductive, student-centered approach to instruction than does T1. T1's notion of evaluation is the teacher checking students' notation to see if it is accurate/correct in the number of beats expressed. The lessons and units of T2 and T3 heavily involve students in making and defending aesthetic decisions, self-regulated learning, and self-evaluation.

Secondly, while there is much focus on language in T2's opera unit, the students' writing and development of libretto (along with writing the music) is musically goal-driven, yet elegantly remains expressive. T2 is cognizant of students' likely experiences and familiarity with children's literature and popular culture/media, using their prior knowledge as a relevant link and springboard throughout the unit. This is a good example of subject correlation which does not undermine music or other subject areas because of the unit's comprehensiveness and length; it reflects legitimate ways to link across subjects. For example, in making puppets, the students' attention is drawn to guided imagery (visualizing), character and personality, and expressing this visually in media and dramatically through performance. There is little focus on mere procedural knowledge about how to make puppets, which is the likely focus of many "interdisciplinary" efforts involving the arts. In language arts, students explore story form in conjunction with form in poetry and music. They work in small cooperative groups in the writing process, make decisions, and revise together. Small-group work also is put to the test in the whole group, so there is much decision making and critique occurring on several levels in a supportive learning community. T1's unaesthetic, technical use of poetry--only extrapolating and tapping the rhythm or meter of a poem--contrasts greatly with T2's use of poetry to help youngsters analyze, understand, and create form. Rhythm (as presented by T1 to teach form) is only one of several ways, according to T2, to create and teach form.

Finally, performance becomes an extended community experience in T2's unit. Rather than re-create someone else's opera for public performance or produce a predictable spring assembly for parents, this kind of performance is more authentic because all dimensions of the artistic work (process and emergent product) have been created, revised, and refined by the students. While students hav engaged in reflective and evaluative activities all along, evaluation takes on significant meaning in the public performance of a work in which students have made considerable intellectual and creative investments. This may more nearly reflect the real activities and feelings of adult artists and composers when they must refine and select their best efforts for an audience--organize and present their ideas, make public, and open themselves to others' interpretations and critique.

Interestingly, most music specialists rarely use opera for content or performance at the elementary level, and some might argue that T2 used opera as a sensational pageant-like, promotional device, given this rarity. However, considering the marginality of the arts in the school curriculum and often its "undisciplinary" qualities when there, T2's efforts are commendable because what is performed is entirely generated by the students in both critical and creative ways. It is hardly re-creative. This teacher happened to be an avid opera buff who had figured out what about opera might not only appeal to students (its narrative and dramatic qualities), but also what important concepts in music and other subjects are naturally embedded in this art form and are there for legitimate exploration.

While T3's students would be involved in creative production and cooperative learning similar to T2's students, T3's students would focus more on existing master works and program music. Public performance is situated in the classroom--a natural, ongoing outgrowth of what students are learning there--not in an auditorium. T3 also considers students' prior knowledge and likely experiences in developing these lessons and activities. Students sing familiar music in their repertoire as well as master works to get at the concepts under study, are encouraged to bring in examples from home, and accompany with autoharp or guitar instead of relying on fancy prerecorded accompaniments. This approach reflects a more natural, vernacular setting for music to be created, recreated, and shared than the public production of T2's unit. T1's approach emphasizes school culture; T2's approach is a unique, pragmatic blend of school and "high" culture; and T3's approach reflects the interests of family and public cultures, a kind of "oral/aural" transmission and re-creation of culture(s) in a learning community.

Goal 3

Goal 3 presented to the experts was to *develop a disposition to actively listen to and enjoy music for its own sake (appreciate the diversity of musical styles and forms and how composers and musicians interpret human experience and the world around them).* What central understandings, key ideas, or generalizations did the teachers think ought to be included here?

T1 responded that students should be guided in listening lessons of music of composers of various styles (Baroque, classical, romantic, contemporary, and folk music). T1 stated that students "will eventually identify the works and list important factors about them. Popular music is usually covered in middle school general music classes."

T2 listed the following key ideas related to Goal 3: (1) Music conveys different moods by change or dynamics, modes, tempo, timbre, texture, and tone color. (2) Music conveys mental imagery through the composer's ability to shape melody, harmony, modes, and other elements of music to the understanding of the listener's ear. (3) Music can interpret human existence and experience through vocal and instrumental performance. (4) Music is composed in many styles (opera, symphonic, vocal, and instrumental solos, ensembles, concertos, sonatas, and choral works). (5) Music of different cultures may differ in sound, style, mood, instruments, and voice production. Finally, (6) different musical forms are used by the composers to convey creative thoughts and aesthetic feelings (sonata, rondo, fugue, free form, etc.). T2 did not provide examples of those thoughts and feelings to be conveyed or exactly how this is accomplished through the forms listed.

T3 decided, after careful consideration, that dispositional goals are embedded in all others and probably ought not be teased out in isolation for instruction:

> This goal is much less amenable to the same exposition of sequence than the previous goals. . . . I believe developing a disposition to seek out musical experiences is more an outgrowth of an environment rich in opportunity and

> deepening of conceptual understanding than it is a focus of explicit instruction. This is not to suggest that this goal is not a crucial one for a music curriculum but instead one that is achieved a different way.

T3 cited two factors that contribute to the achievement of this goal, which are recurring themes in T3's responses throughout this exercise:

> The student must have opportunity to experience music of many styles, genres, cultures in order to appreciate the rich diversity of musical expression in culture. Consider, for example, the ease with which different types of music can be enjoyed, thanks to advances in electronic reproduction in addition to diverse live performances available. . . .
>
> The student in the music classroom must be immersed in musical experience, modeled by talented teachers, and offering a range of participation--performing, describing, and creating. As understanding increases, we can hope that the student will increasingly value music.

Comparison of teachers' views about organization/presentation of key ideas. All three teacher experts see the value of exposing students to diverse forms and styles of quality music over time. T1 is less tolerant of vernacular and popular music than perhaps T2 and T3 might be. Further, T1 seems to have a limited vision of music appreciation: correctly identifying works and listing important factors about these. T2 focuses a great deal on mood, the expressive features of music as an art form, and the feelings which music connotes or engenders in students. Given T2's overall spirited approach to music, this goal likely would be as explicit to T2's students as those related to understanding elements and concepts. T3's approach toward this goal would be much more implicit than that of T2. Positive dispositions and appreciation of music hopefully would be natural outcomes of students' multiple encounters and experiences with music and their developing conceptual understanding. Both T2 and T3 appeal to a kind of "immersion" in rich musical experiences rather than the more distant, passive view implied by T1 in developing students' dispositions.

Teachers' Perceptions of Relationships Among the Key Ideas in Goal 3

Again, the experts were asked what kinds of relationships exist among the key understandings listed for the third goal. Do all the key ideas fit together into a single network? Are two or more of them linked through cause/effect, rule/example, whole/part, or other logical relationships? Do some of the ideas form natural sequences along some common dimension?

T1 responded that students should learn how the styles evolved (historically and geographically), similarities and differences between the styles, instruments used, and performance practices. T2 stated that the relationships "are interrelated. The part/whole, cause/effect are all linked together in some form to give the listener an appreciation of music of different styles and forms." T3 did not make any further statements about dispositional goals. (See response under "central understandings" related to Goal 3, p. 73.)

While T1 sees an array of understandings possible under Goal 3, their potential relationships are not made explicit, other than by cause-effect and sequencing of historical events or periods. T2 and T3 share similar ideas about how dispositional understandings are highly interrelated, and how appreciation is intricately connected to conceptual understanding in music. One cannot really appreciate music unless one has learned about/in it and understands it.

Organizing and Presenting Key Ideas in Goal 3 to Students

When asked how they would organize the key understandings and generalizations related to this goal for presentation to students, the teacher experts responded as follows.

T1 stated that listening lessons should begin as early as preschool and kindergarten. The lessons should be presented concurrently with the "master sequence skills" for music reading and writing, and the skills would be "extracted from the music being listened to." While listening to master works, students would be asked to isolate various elements of rhythm, melody, harmony, form, and instrumental qualities studied previously, and in accordance with the amount of master sequence skills studied to date. "This is done with the hope the students will feel comfortable with each style of music composition and eventually be able to make satisfying listening choices from these styles. (Peer pressure and home environment have enormous impact on these choices.)"

T2 did not respond to this segment of the question, instead providing a sample lesson plan, which follows. Both T1 and T2 make reference to developing students' tastes and choices in music, particularly in terms of choosing what to listen or attend to as audience. Despite attention to the contexts of history or style, T1 still expects students to do little more than extrapolate elements from master works rather than seeing how the elements work together in complex ways and contextually.

T3 did not make any further statements about dispositional goals. (See response under "central understandings" related to Goal 3, p. 73.)

Teachers' Sample Lesson Plans for Goal 3

Experts were asked to propose/design a specific lesson plan for Grades 2 and 5 to develop one of the key ideas they listed in the previous section.

For Grade 2, T1's objective was as follows: "While listening to Beethoven['s] Symphony #7, third movement, students will identify [meter in 4, instruments, and form for the first half of the movement]." T1 said that the listening lesson would require several class sessions and that the lesson submitted focused only on identification of the meter. Students would review meter of 4, do some short rhythmic dictations using rhythmic patterns, and listen to the Beethoven segment. Under this, T1 listed "tap beat, identify meter, and conduct meter while listening to recording." For reinforcement, students would listen to this movement several times (about eight), and activities would vary across time (i.e., identify meter, conduct meter, identify prominent rhythm patterns, and write prominent rhythm patterns). For evaluation, the teacher would observe students "for correct conducting of meter" and provide writing lessons involving rhythmic patterns in the recording as well as identification of instruments used.

For Grade 5, T1 would have students identify meter of 6, instruments, and form of the second half of the Beethoven movement (above). Students would review meter of 6/8; do some short rhythmic dictations using a dotted quarter note, three eighth notes, two eighth notes, and two sixteenth notes; and then listen to the Beethoven movement from the beginning. Students would conduct the first half (meter in 4) and would be instructed to raise their hands when the meter changed. Students would identify this second section as 6/8 meter and conduct the entire third movement with these meter changes. For reinforcement, students would listen to this movement several times with such activities as tapping rhythms, conducting meter, and identifying instruments, form, and mode. For evaluation, the teacher would observe students' conducting patterns for accuracy and provide writing lessons involving rhythms, meter, instruments, and form. In these particular lesson plans, there was no evidence of T1's attention to students' dispositions toward Beethoven's work and no background information provided on style, history, or the composer. Both lessons focused on discrete elements related primarily to rhythm, and differed little from sample lessons presented under Goal 1.

T2's sample lesson was written for Grade 5 focusing on students recognizing "theme and variations" as a form. In presenting Mozart's variations on "Twinkle, Twinkle Little Star," the main concept to be explored would be that "the variations on a single theme will constantly change the mood of the work giving it interesting contrast throughout the piece." Students first would be asked if they could define variation. Next, the teacher would write "theme" on the left side of the chalkboard and "variation" on the right, asking students to do likewise on a piece of paper. Under the theme side, students would be asked to write "hamburger." Under the variation side, students would add their favorite addition (variation) of condiments to the burger. (Or the same could be done with "ball" as a theme and "baseball, basketball, etc." as variations.)

T2 then suggested that the teacher write the basic theme of "Twinkle, Twinkle Little Star" on the board, ask students to sing the melody with musical syllables (rather than words), and ask them to identify the melody. A Mozart recording would be played, and the teacher would ask students to keep track of how many times Mozart changed the theme. Then students could walk around the room to the theme, and each time they heard the theme altered, they should change their style of walking. "This exercise will not only make them listen, but will allow them to express the difference in the music by their change in body movement," T2 added. Then students would discuss how many variations were in the piece, how many different ways Mozart changed the theme (tempo, meter, mode, key, rhythm, dynamics, etc.). T2 then would have students express how each variation made them feel (sad, happy, bold, etc.). A follow-up lesson might have students compose a variation of their own, deciding which variations would sound the best together, and performing the composition by using different instruments. For evaluation, the teacher would play selections of music with AB, ABA, and theme-and-variation forms and have students identify the theme-and-variation forms, giving examples of how the variations were developed. T2 suggested that this same lesson could be used in Grade 2, the only difference being drawing pictures of a theme and variations rather than writing the words.

T3 did not make any further statements about dispositional goals. (See response under "central understandings" for Goal 3, p. 73.) Interestingly, T2's lesson above is very much like the sample lessons provided by T3 under Goal 2 on "form." While T2 asks students to describe how different variations make them feel, T1 ignores this dimension under a dispositional goal. While both T1 and T2 include student compositions as well as listening to master works, T1's delivery of composition is limited in terms of what students would be required to think about and do. Like T3, T2 uses iconic representations (hamburgers, ball) before using formal music symbols with students. Like T3, T2 would have students involved in a movement activity (inactive stage), but not necessarily presented in the same order as T3. T1's idea of movement is conducting in meter.

We now turn to a comparative analysis of the responses of our two expert panels--university professors and teachers--to summarize the most salient findings and to discuss implications for practice.

Comparative Summary of Experts' Views and Implications for Music Education

With such a small, selective sample of only six music experts in this study, it isn't wise to make sweeping generalizations about the differences between professors and teachers as distinct, representative groups. It would be more appropriate to highlight their commonalities as experts. First, in the selection of this study's subjects, theoretical representativeness within groups was sought. For example, we chose not to select only those participants who represented a constructivist view of teaching and learning. Secondly, experts were sought who had an expressed interest in teaching music for understanding (however they defined understanding beyond rote learning, drill, and practice). Finally, only the views of music specialists are represented here, not those of teacher educators or classroom teachers who also may have a fondness for the arts or expertise in teaching these areas for understanding.

While our experts may argue that teaching music for understanding requires in-depth disciplinary knowledge and specialized training, there are some generalists with similar knowledge and training who have elected to cover wider terrain and incorporate their knowledge and experiences into their curricula and teaching. Also, there are trained specialists who hardly fit the elaborate picture and pedagogical talents presented by our experts. There are teachers so ill-prepared in the arts as generalists or specialists that their teaching music in the ways our experts described would be impossible without additional training as novice learners and experienced teachers.

Responses to Key Features and Goals of an Ideal Curriculum

The key features, developed by Center researchers, of an ideal curriculum presented to university and teacher experts were developed from a review and synthesis of the literature on cognition and teaching subject matter for understanding. Experts were asked if they agreed with the five features of an ideal curriculum presented to them, to elaborate on any disagreements they might have, and to identify any additional features of ideal curricula which they thought were important and should be included.

All of the experts generally agreed with the key features presented to them. Of particular interest seemed to be depth over breadth, connecting ideas and/or plausible coherent sequencing, and the importance of students' active construction of meaning in music. For example, P3 said that "breadth of learning without depth will never give rise to intense or deep investigation." However, reducing music to a handful of "powerful ideas" (as in the natural sciences) struck P3 as undesirable and probably impossible in the humanities. T3 argued that teachers and students also give attention to metacognitive processes: "Students might be asked to monitor and guide thinking before, during, and after learning tasks so that a sense of direction and intent pervades the learning experience." Thus, how teachers and students constructed ideas and musical understanding was as important to the experts as the disciplinary ideas constructed.

Interestingly, while the professors were rather fluent in discussing musical constructs and concepts, the teachers' descriptions (particularly via their lesson plans) were rich with concrete examples of what these concepts are/mean and how to present, organize, teach, and evaluate students' conceptual understanding. For the most part, they kept these bigger ideas, concepts, and principles visibly in mind in their discussions of units, lessons, and activities. None relied on commercial materials. They attended to students' prior knowledge and likely understandings and experiences somewhat better than the professors did. Despite being immersed in the thick of practice with all its competing demands and complexities, the teachers were quite clear and explicit about their goals, what in music they were trying to teach, how these "big ideas" are connected and could look in practice over time, and how to accomplish their objectives with youngsters using multiple strategies. The professors were a bit more formulaic in their suggested teaching strategies, even P3. Except for T1, the teachers seemed to have a fluent and flexible representational repertoire for teaching difficult concepts and principles in music (i.e., metaphors, visual symbol systems, figurative languages for notating, analogies, stories, provocative questions, experiments and hypotheses, student writing, and knowing how to facilitate and process student dialogue and cooperative learning in small groups).

Teachers were more apt to raise issues about contextual constraints in the workplace than were professors, although remarkably few constraints were mentioned. For example, T1 suggested that the time typically allocated to music per week must be considered in an ideal curriculum. How one can develop students' depth of understanding and appreciation in music in weekly 25-minute encounters with 1200 students is a serious issue. T2 raised the issue of fragmented subject matter in the elementary curriculum and the need for integrative themes and experiences across subject areas to help students understand the relevance of learning and the potential relationships that exist among different ways of knowing and diverse applications of this knowledge. P1 raised the issue of the specialized knowledge required to teach music for understanding, thinking that classroom teachers would not be able to accomplish the goals presented because of their lack of knowledge, expertise, and training in music. Marginality of the arts extends beyond K-12 education.

The goals presented to the experts were derived by analyzing literature and position statements in music education and curriculum materials. The first goal addressed the study of musical elements (i.e., pitch, rhythm), symbols, and the "language" of music. The second goal focused on the artistic process and decision making. Such understanding would involve examining the interests, knowledge, and decisions persons often use to compose or create music for listening or performance. The third goal referred to developing positive dispositions toward music and understanding why people create and engage in music in sociocultural context.

Half of the experts defined music to clarify their points on key features and goals. P1 defined music as "an arrangement of sound and silence." P3 argued that music is not a fixed external object, but is abstract and fluid. Music rests on human cognitive construction in all phases of its existence--composing, performing, and listening. To P3, music was "thinking in or with sounds," and this natural cognitive activity occurs in interaction with a musical style and community. For T3, music teaching and learning were based "in sound." Music was not knowledge about music. Conceptual understanding meant that the concepts being studied must reflect the qualities of sound heard or be based in aural experience rather than in notational symbols used to capture sound.

As anticipated (because of purposefully selecting representative viewpoints), the experts in this study held different views of knowledge, theories about music as a way of knowing, and teaching-learning related to such. The experts' views were not identifiable by social role or status. That is, professors did not hold one common view while teachers held another. Epistemological viewpoints were mixed within each panel of experts and more or less matched in interesting ways across panels rather than within them.

One way to categorize the experts' views of knowledge is in terms of "received" or "reflexive" knowledge (Eggleston, 1977). Persons who view knowledge as received see it as an external body of preconstructed information and skills which can be transmitted to others rather unproblematically with a great deal of modeling, skill, and practice. "Cultural literacy" advocates represent this view. The great ideas and works of Western civilization are to be handed down to each new generation, ignoring the problem of which of these vast works are to be handed down, why, and to whom, and which ideas (particularly from other diverse cultures) are to be ignored or omitted. Viewing mathematics as a set of fixed rules and algorithms to be learned and repeated, and not questioned or theorized about, is another example. Believing that the words and terms we use have fixed, well-understood, or shared unarbitrary meaning is an example of the received view of knowledge. Viewing curriculum development or critical thinking as a hierarchical, linear sequence of prescribed steps and skills also represents this view of knowledge. Viewing history as a chronology of dates and events with simplistic claims of cause-and-effect hardly allows understanding history as some group's narrative (but perhaps not all groups involved or affected), one's own biography in social context, continuity, or multiple but plausible interpretations of past events due to rival evidence and the different interests and world views historians bring to their work.

Persons who view knowledge as reflexive see it more as a personal and social construction in constant formation, a dynamic interaction between teachers and learners who impose their own meanings on that which they encounter and bring to a community context. Given additional attention to knowledge in social, historical, and cultural context, knowledge is made problematic--not only for the learners but for the teachers as well. Selecting what is most worthwhile to teach and learn is no easy task for the teacher. Such decisions are pragmatic as well as moral and socially influenced.

From the reflexive viewpoint, knowledge also is made problematic for the discipline; that is, disciplinary knowledge is seen to be in constant formation and revision, and relational to other disciplines or ways of knowing in sociopolitical and historical context. For example, the economic and political theories of social Darwinism (and subsequent policies and practices) were made possible or partially influenced by theories of evolution and natural selection in natural science, the public's access to Darwin's published ideas, and public as well as scholarly debates. "Mental discipline" or "faculty psychology" at the turn of the 20th century also was partially influenced by knowledge construction/theories in other disciplinary areas and in the broader social and historical context of this theory's time. Therefore, those who view knowledge as reflexive, view it as mutually produced and reproduced within and across social institutions and disciplinary boundaries in historical context. They view it as reflexive between individual biographies/experiences and the social contexts and webs in which individuals find themselves inextricably linked. In schools or classrooms, reflexive thinkers acknowledge this perpetual tension, fluidity, and interplay--not only as "the way it is" in the world, but as a healthy way to construct personal and shared meaning(s).

In this study, P1, P2, and T1 most represented a "received" view of knowledge, with P1 more toward the middle. P3, T2, and T3 most represented the "reflexive" view. Our experts' views can be arrayed by their explicit orientations to knowledge (as expressed) or by their implicit theories embodied in their discussion of goals, content selection and organization, teaching and learning processes, and evaluation. No professor or teacher works without a theory-in-action, or a theory of practice. Some simply are better at articulating their beliefs and defense of these than are others. On a continuum from external control to internal control of the learner, behaviorism would fall at the "external" end and experiential learning at the other. The behaviorist end would reflect a "received" view of knowledge; the other end, "reflexive." One caveat is that "constructivism" is currently defined in many ways. For example, some neobehaviorists claim to be constructivists as do Piagetians and Vygotskians. Although our experts sometimes waffled among perspectives or contradicted themselves, their positions (drawn from the salient themes and interests presented in this exercise) might be located as follows:

Theoretical Perspectives of the Experts

External Control ⟷ Internal Control

Behaviorist	Information Processing	Constructivist	Developmentalist	Experientialist
P2 and T1	P1	T3	P3	T2

While all of the experts might claim to be constructivists or agree with the key features of an ideal curriculum presented to them (for the most part), their views often were articulated in distinctly different, consistent ways. For example, P2 was concerned about motivation, modeling, transfer, aural stimuli and re-creative responses, drill, and practice. P2 also suggested true-false or multiple-choice tests for evaluating student learning. P1 stated that learning notation was necessary for a performer to be able to "*replicate exactly* what the composer wants" (italics added). However, P3 argued that notation is a mere reflection of music which can never wholly capture the composer's intent or the "true" meaning of the music and how it should be read or performed. True meanings (certainty) can never be known.

P3 felt that the implicit orientation of our list of key features was information processing. P3 made clear that his/her views represented Piagetian cognitive developmentalism. Yet, P3's views often reflected experientialist interests. Classroom activities proposed by P3 were much more fluid and student-generated than planned for or responsive to arbitrary, hierarchical "stages of development." T3's views were very much like P3's, with influences from Piaget and Bruner.

T1's theoretical orientation was most evident in the sample lesson plans submitted and discussion of music elements. Musical concepts were bits and pieces to be learned, mastered, performed, and tested, which hardly ever connected, despite T1's claims about a "mastery sequence" and connecting musical ideas. In the interview, for example, T1 expressed surprise when it was suggested that experts had different ideas about what "the" elements of music were and how these were related. When asked about how one determines grade-level sequencing of concepts, T1 suggested that "everyone in music [knows what to teach in each grade level]--don't they?!"

T2 was keen on students' enjoyment and their extended involvement in music of their own making, particularly opera. T2 was most concerned about student relevance and integration, wanting learning to make sense across the curriculum in the context of the whole school as well as in music and the school's extended community (parents). Interestingly, despite all of these differences, almost all of the experts stressed listening, performance with improvisation, and student composition as desirable activities, none of which may be normal fare in typical practice in music at the elementary level, no matter one's theoretical orientation.

All of the experts said that there are many ways in which students demonstrate understanding in music without having to verbally articulate their understanding. Students can discriminate some concepts in music without being able to perform them well yet; and, they can understand and perform some concepts intuitively and informally without being able to articulate their understanding in words (P3 and T3). Some understandings that appear to be logically and necessarily prerequisite to other understandings in music are not supported as such by some empirical research (P3). P3's claim regarding this also seemed to contradict his/her claim to hold a developmentalist view about learners and learning. Thus, most of the experts proffered diverse approaches and activities in music: listening, performing, describing, analyzing, judging, and composing, and few were as skills-focused as P2 and T1 in terms of perception and performance. Most of the experts stressed listening, improvisation and/or experimentation with isolated variables under study, and students' in-class composition and improvisation for and with each other. P3, T2, and T3 stressed the importance of student discourse, metacognition, and self-evaluation as featured aspects of all the above activities.

All of the experts stressed the importance of aesthetic enjoyment and developing positive dispositions so that students would become independent in their musical choices and discerning in their judgments. This meant that students must be exposed to diverse examples of quality music, have multiple encounters with works, and develop a tolerance for diverse styles and genres in order to base their judgments on understanding beyond personal preference and opinion. All of the experts suggested that dispositional goals were accomplished primarily through a curriculum focused on concept development rather than by isolated attention to affective goals. Thus, positive dispositions are a by-product of teaching for understanding and quality experiences with/in music. T2 emphasized affective and social goals more than the others, but it was obvious from the unit and lesson plans submitted as examples that T2's students could develop a memorable and rich understanding of musical concepts in the process.

Several of the experts added features they thought were particularly important for an ideal curriculum. P2, P3, T1, and T3 distinguished "real" versus "not-real" or "contrived" content, activities, and presentations in music. In general, this meant that "real" music has a purpose beyond school work, perfunctory re-creations of precomposed works, and rehearsals or practice. P2 and T1 differed somewhat from the other experts in this response, focusing more on re-creative objectives and students' developed responses to aural stimuli ("real" artistic pieces) than on interactive, creative, expressive objectives. However, P2 was much like P3 who defined "not-real" music as learning scales and many of the songs and compositions within a special genre of music called "school music." T2 was very adamant that applications be meaningful to students. T2 and T3 referred more to musical independence, real-life applications, and student relevance as primary features or goals of ideal curricula than did T1. T1 was more concerned about "mastery."

While P2 defined "real" music as artistic works versus pedagogical materials, P3, T2, and T3 included students' vernacular repertoire and acknowledged the importance of students' out-of-school experiences as a significant influence on school curricula. The teachers, more than the professors (except for P3), seemed attuned to students' likely out-of-school experiences and how these might influence their academic understanding and appreciation of music. None of the experts, however, used much popular music in their ideal curricula to appeal to students' likely preferences/experiences. All experts acknowledged the fact that most students would not become adult musicians, therefore, developing literate and appreciative consumers of music was a primary goal. However, in order to become musically literate participants and consumers, students had to learn how to think in music or how to think musically, with knowledge and skills ordinarily understood and used only by composers and musicians.

Content Selection and Organization

According to the experts in this study, content in music can mean four things:

1. The musical literature and artistic works selected and used for the analytical study of musical concepts as well as for building a musical repertoire and appreciation of music across styles and genres of music

2. Pedagogical materials, or music composed and written by educators or contemporary composers to stress particular musical concepts or understandings

3. Students' compositions

4. Musical concepts, or what in the above selected works and materials are to be understood by students as music

Of these forms of content, all but pedagogical content were considered legitimate content in music, even though P2 would not emphasize students' compositions as "authentic" music. Most of the experts said that pedagogical materials tend to be pedantic, of poor quality, and therefore are poor examples of music to present to students. One might as well use musical literature of high quality than not.

Interest in aesthetic enjoyment and students' abilities to make defensible judgments about music implies the need to select music of high quality, lasting appeal, appropriate to the ages of students, and representative of different styles and genres. Thus, there was serious concern among all the experts about content selection in terms of musical literature. Given that there is so little time devoted to music in the school curriculum, the selection of musical works is a crucial curriculum decision. Our experts argued for examples from classical Western tradition in addition to non-Western music, jazz, folk music, and representative contemporary styles. How much of Bach or Brubeck, how often, and when (in terms of presentation by grade level) were questions skirted by most of our experts. What was made clear is that such literature should be revisited through the years, therefore, multiple encounters with exemplary works are important to construct a repertoire as well as musical understanding.

In terms of the content to develop students' conceptual understanding in music, experts tended to agree on the elements of music to be considered, such as rhythm, pitch, style, form, etc. Some experts' lists were more extensive than others (P3 and T3 in particular), and experts did not always agree on how these ideas were related to one another, particularly as inclusive or nested categories. While all of the experts talked about how these elements form a gestalt and are highly interrelated in any given piece of music, several of the experts treated these elements in isolation of one another in individual sample lesson plans (P1, P2, T1, and sometimes T2).

P3 suggested that learning about pitch and rhythm or the elements of music will hardly teach students about music. P3 provided the following central concepts in music: There are temporal and nontemporal qualities to be understood in music. Under temporal qualities, music has a simultaneous dimension (texture, motives, timbre) and a successive dimension (idiomatic construction, motive chaining, patterning, and phrasing). Under nontemporal qualities, music has closure, transformations (relative repetition, ornamentation, and substantive transformation like inverting the melodic contour), abstractions (both rhythmic and melodic), and hierarchic structure. According to P3 and most of the other experts, competent listeners do not treat the thousands of tones in a composition with equal regard. Rather, "some tones are singled out as central, pivotal events and give the piece its overall shape and effect." This is possibly what P2 had in mind in stating that pitch/melody were probably the most important elements in music to study.

The two experts (P3 and T3) who spoke most eloquently of the interrelationships among musical ideas tended to state musical concepts as principles rather than as definitions of simple words, elements, or fragments of bigger ideas. For example, T3's explanation of "style" suggested more than a simplistic definition: "The way musical elements are combined into a whole reflect the origin of the music." From this principle, we can infer the following: style is created by selecting and using several musical elements--not just one; whatever these elements are, they are arranged and can work together in a particular way to achieve unity, coherence, or a particular effect (or whole); and how and why people choose to arrange these particular elements in the ways they do is socially and contextually bound, and situated historically. This implies that there may be many different origins or kinds of music (style) since not everyone in the world lives in the same place or group, and not everyone in the world may choose to arrange musical elements in the same way. There seem to be choices available here. This also implies that if we are members of a particular social context and time, we may prefer to create and listen to styles similar to those with which we are most familiar. We might consider these familiar styles more comprehensible, beautiful, or powerful than unfamiliar ones. On the other hand, we might find unfamiliar styles provocative, challenging, and fun to listen to or perform because they are so different from what we know.

The point in the above digression is that when curricular content is stated in "big ideas" or principles (as opposed to lists of discrete facts, elements, or behaviors), there is room to tease out what important ,related ideas students would need to understand in order to understand this bigger idea or principle. There also are many directions one could pursue to achieve this understanding. In the above example, we can pursue multiple analyses of a single musical piece, comparative analyses of "designs" of pieces that feature similar elements but in different organizations, comparative and cross-cultural analyses of style focusing on the same one or two elements, historical analysis and interpretation of why style in a particular context changes over time, aesthetic response and interpretation, or criteria for evaluative critique--no matter the genre or style--or paying particular attention to judgment based on the work's style, located in its own context.

Other than some discrepancies among the experts over the elements of music, there were more visible disagreements about the significance of learning to read musical notation as musical content. Generally, all but P3 and T3 suggested that it was important for students to learn to read notation in its traditional symbolic form. P2 and T1 were particularly supportive of this. P3 and T3--and to some degree, P2--inserted "prereading," nondiscursive kinds of activities, icons, and symbol systems into their lessons to provide a transition for students. All experts agreed that eventually students ought to be able to read notation so that they can participate independently in musical activities and have access to other cultures and styles of music via written notation.

T3 focused on three forms of student representations in a fairly strict sequence: inactive (movement), iconic (figural symbols which correspond closely with formal symbols and their meanings in sound), and symbolic (traditional notation). All but P2 recommended that students learn to notate their own short compositions in whatever symbol systems work best for individuals. P3 stated that notation is only a record of what has been reflected upon and thought important by the composer, and T3 cautioned that concepts are based in sound and reflect relationships to sound.

Symbols serve as referents for the sound and hold little meaning apart from that reference. P1 and T1 approached the content of notation much like phonics and decoding in reading language. The other experts did not.

P3 stated that notation was "secondary" content. Such interests in notation "place emphasis on noncognitive acquisitions . . . , and they erroneously attempt to teach formal knowledge of notation, music theory, and so on, before rather than after cognitive understandings have been acquired." Other forms of secondary content in P3's opinion were information about rather than in music (names of scales, facts about music history and famous composers) and the ability to reproduce in performance a fixed repertory of compositions. P3 and T3 were quite alike in their views of formal notation as content and what else could be considered peripheral content in music.

Most of the experts agreed that musical works should be selected on the basis of what the music features, or what can be made obvious to students with respect to the particular concepts under study. Thus, one approach to organizing and presenting concepts was obvious-to-subtle. For example, Mozart's variations on "Twinkle, Twinkle, Little Star" highlight one example of musical form: theme and variations as opposed to ABA or some other structural form in music. Both T2 and T3 cited such examples. However, P3, T2, and T3 were more concerned about dealing with an entire work of music in a meaningful context rather than extrapolating a single feature for discrete analysis. For example, T3 said the learner must "still deal with the work as a whole and the network or web of musical interactions as a whole." P3 and T3 were more apt to teach multiple concepts as interrelated in any given piece than the other experts who tended to isolate a single concept for presentation. Also, understanding repetition and contrast featured significantly in the experts' views of understanding music. The Mozart piece cited above relies on this approach as well as obvious-to-subtle.

All experts spoke of the complexity of music--its multiple elements and subtleties which present themselves simultaneously. Most experts suggested how complicated it is to determine which features and concepts ought to be attended to and/or extrapolated in any given work for formal study. Even when key concepts are isolated for manageable analysis, the parts must be put back together to be appreciated and understood as a whole again, or as music. This is a kind of part-to-whole approach to teaching concepts as content. All of the elements present in works of music are organized in particular ways by composers and work together as a unified whole to create particular expressive outcomes or effects.

While T1 recommended a strict "master sequence" for presenting musical concepts through the grades, particularly in terms of reading notation, there was no rationale provided for why certain concepts were presented when they were, and many of the concepts were low-level facts and recall. The other experts recommended a spiral curriculum that builds on concepts gradually, year to year. Almost any musical idea is fair game at any grade level because all music contains the elements upon which concepts and understandings are based. Thus, there would be much revisiting of learned concepts and successive listening to works in the presentation of new concepts. Also, new musical literature and students' own compositions from the early grades on would be incorporated to develop their understanding of concepts. P1, P3, T2, and T3 were most supportive of using student compositions as legitimate content. T2 also viewed musical concepts as related to other disciplines and ways of knowing and was the only expert in this study who espoused interdisciplinary connections among ideas and students' experiences.

Most of the experts argued that sequencing of concepts in music is less linear than it might be in other content areas. One doesn't expect students to demonstrate understanding of melodic concepts before moving on to rhythmic concepts, for example. Sequencing varies, depending on the length and complexity of the musical example being used, the number of simultaneous dimensions that serve as a focus, and the stage of knowledge representation of the learners (P3). Selection of concepts and musical literature complicates things all the more in planning. For example, P2 stated that "the use of melody is different in chant and in hymns, a Philip Glass opera is different from one by Puccini or Handel." While the above discussion may seem like quicksand in terms of making intelligent curriculum decisions, there is much flexibility for teachers in planning and much versatility in the ways students' knowledge could be explored and concepts applied.

Views of Teaching, Learning, and Evaluation

Given the explicit and implicit theoretical orientations of our experts, one can anticipate how P1, P2, and T1 would view the teaching/learning process. These experts tended to view knowledge more as received than reflexive. Thus, the teacher assumes a prominent role in the classroom. In general, these experts select a concept to be taught, present a listening example to students, extrapolate the concept from the music for analysis, have students perform with some experimental accompaniment or improvisation, and listen to/perform the whole musical piece again. P2 included little improvisation and focused more on recreating precomposed music (albeit "with expression"). Both P1 and T1 might use improvisation and student composition, but this would be fairly limited as they described it in their sample lessons (i.e., T1 asked students to write an 8-beat response to the teacher's musical "question"). For evaluation in the Grade 2 lesson, T1 would have students take a written test, write measures of music in the meter of 4, or conduct in a meter of 4. This approach varied little for Grade 5 along the same concepts; thus, it was difficult to see how T1's "mastery sequence" spiraled in complexity. The form of evaluation also did not change across lessons and centered on the teacher's judgment--not the students' own evaluation of their efforts.

In order to reduce the quantity of material to be taught, P2 stated that

> the [few] elements suggested would each be used to explain how one analyzes music, how one communicates to performers about music production, and how one listens to music. These elements would be used in the classroom as we performed, as we judged, as we listened.

Thus, P2 relied much on teacher explanation, modeling, and guiding students in making appropriate judgments about precomposed works or their own performance of these works. Possible criteria for making such judgments were provided by several of the experts, usually extending beyond students' personal preferences or opinions.

P3 differed dramatically from the other professors. P3 would begin with composition after a problem or idea had been established, and all other matters such as performance and listening would be geared primarily toward students' compositions--not those of adults. Thus, P3 was more experientially based and student-centered than P1 and P2. "The primary thrust of their work would relate to their own thinking, compositions, performing for each other, and discussing these works," stated P3. There was little recitation or frontal teaching in P3's classroom, with more individual and small-group student discourse and groupings. P3 established a community of musical discourse which did not seem to stop at class bells nor depend only upon particular concepts or content this expert had in mind.

T2, with a strong interest in relevance, integration, interdisciplinary planning, and student enjoyment, designed lessons across subject areas. The first sample lesson was geared more to social studies than music, but an underlying theme throughout the lesson related to the source and social context of artists' or musicians' inspiration. However, this approach to social education was uncritical and bordered on patriotic indoctrination. T2 used guided imagery and emphasized feelings and expression in a variety of activities that extended beyond one lesson. T2 also drew upon students' knowledge of music, social studies, and everyday life to develop lesson extensions into written reports, art, rewriting lyrics or writing new ones, and other activities in concert with classroom teachers.

T2's opera unit also revealed an abiding interest in expression as well as concept development related to form, via opera and poetry. T2's approach to teaching/learning was highly experiential with students working in small groups, independently, and in whole-class activities deliberating on small-group efforts and the contributions of these to the working, evolving whole. Musical thinking and decision making were genuinely embedded in authentic music-making activities, and even P3 might have approved and not called T2's unit "secondary content" because of its curriculum correlations. That the work emerged from students' developing understandings and efforts might appease P3.

T3 worked out elaborate lessons that accounted for students' likely prior knowledge. T3 tended to present concepts as puzzles to figure out in small-group work with much classroom discourse. T3 also included notation as a significant activity, like P3, in figural terms. Compared to all of the experts, T3 was the most attentive to metacognition and having students' reexamine and verify their "answers" through a variety of questions and activities. In all of T3's lessons, students were encouraged to develop a plan in small groups and then to monitor their work as they organized their ideas, chose from alternatives, practiced their compositions, and performed for each other in class. Discussion often centered on students' choices and their explanations and interpretations of these choices in light of the effects in music. T3 also suggested assigning the same theme to all students and then having students compare treatments of the same theme which "would provide a forum for artistic ideas." Musical discourse was an important feature of teaching for understanding and a significant method of student evaluation and critique for more than half of the experts in this study.

Pronounced among P3, T2, and T3 was an interest in student composition. For most of the experts, students were viewed as capable of creating authentic music in authentic ways. Composition was not conceived by these experts as merely a means for students to apply and demonstrate their understanding of musical concepts. Composition was one of the primary ways in which students constructed conceptual understanding in the first place. In fact, T2 and T3 probably would agree with P3 that in order to engage in the artistic process of composing, knowledge or facility with musical elements is not necessarily a prerequisite understanding in the traditional sense. Understanding would be constructed in and from the problem-finding and problem-solving features of composing.

What is desirable at the elementary level is "real engagement in the process, no secondhand observations of what adult artists are doing" (P3). P1, P2, and T1 were more inclined to support the notion that the more one knows about elements, the more one is in a solid position to make well-reasoned value judgments and to create music. However, T3 argued that as students create their own works, a cycle of generating ideas and filtering out inappropriate ones occurs in a creative and critical context. Further, composing, performing, perceiving, and listening are inextricably linked in constructing musical understanding, according to all the experts. All suggest that understanding music (at one's best) involves understanding and appreciating music's shape, form, substance, subtleties, nuances, and social context.

For P1, the artistic process related foremost to the manipulation of given formal elements of music, colored more by individual background, experience, and choice than by one's social/historical context--or the rules and principles shared in a musical community in a particular time and place. This view contrasted sharply with those of P2, P3, and T2. While a goal was specified for addressing the social/historical context of music, most of the experts (except for T2) tended to ignore this goal in their sample lessons or concrete examples. It was as if students were to understand culture, style, and history by osmosis and exposure, merely by the works selected as musical literature, and with a intense focus on musical elements and form while encountering these works.

But for T2, experts' responses with sample lesson plans (and goals to guide them) were quite revealing about their views of music as a discipline. Music is in or about sound. Music is not so much about human experience and the social world beyond the classroom or musical works under study. P1 did not "try to teach students that composers interpret human experiences and the world around them. . . . The composer's intent or the world in which the composer lived is not particularly relevant." P2 stated that "to know how composers and musicians interpret human experience and the world around them--my answer is sometimes they don't." P3 stated,

> Music's "own sake" is patterns in sound. Anything else that is not sound--such as love, war, religion, and feelings of any sort--are not at all about music's "own sake" but are, on the contrary, about people and their world.

Perhaps a clue to why most of the experts erected a fence between music and life beyond the classroom is reflected in P2's expressed concern that he/she did not know how to organize or develop students' understanding related to criticism, music history, and aesthetics. Another reason may be that the experts felt that understanding music in social/historical context--like expression and developing positive dispositions--was adequately addressed and naturally embedded in the musical literature and activities selected for instruction. However, P2 (like T2) expressed the following: "Music can be a special activity like attending a concert, but music can also be well integrated with work, play, church, and family. . . . Specifying these interrelationships in instruction can lead to a more thorough understanding" of music.

Implications

The Music Educators National Conference (1986) states that the fundamental purpose of teaching music is to develop in each student the the following outcomes for students as a result of a quality music program: Students

> are able to make music, alone and with others
> are able to improvise and create music
> are able to use the vocabulary and notation of music
> are able to respond to music aesthetically, intellectually, and emotionally
> are acquainted with a wide variety of music, including diverse musical styles and genres
> understand the role music has played and continues to play in the lives of human beings
> are able to make aesthetic judgments based on critical listening and analysis
> have developed a commitment to music
> support the musical life of the community and encourage others to do so
> are able to continue their musical learning independently (pp. 13-14)

In comparison to the above goals and what these experts posed collectively, it would seem that the typical fare in elementary music classes hardly fits the bill. The experts in this study included most of the above goals in their proposals of ideal curricula and their examples of practice. Also important to note is that, while most of these experts differed in theoretical orientation to music education, most addressed these multiple goals in thoughtful and provocative ways. While they varied in the degree to which they would stress expressive outcomes, all attended seriously to aesthetic enjoyment in their considerations of developing students' understanding of music. They distinguished "real" and "contrived" content, activities, and presentations, and they all agreed on the need to select and use quality music as examples. For almost all of the experts, student improvisation and composition featured significantly in teaching and learning, as did listening, describing, and performing.

Given the above kinds of understandings in music to be developed, the most obvious question is, who can teach music in the ways described here? Most classroom teachers will have little knowledge and preparation to teach music as described in this study, and it is doubtful that commercial materials--however well developed and seemingly complete--could ever compensate for teachers' lack of knowledge and direct experience in music as learners themselves. Thus, the nature and quality of professional preparation and staff development in elementary education as well as in music education becomes a central issue. Either we need more music specialists like the experts in this study or we need to approach music methods courses differently in elementary teacher preparation programs.

Music educators need to attend more critically to the kinds of difficult curricular and pedagogical decisions that music teachers and classroom teachers must make in actual practice and the cumulative impact of these decisions on students in terms of what they will come to understand as music. Why is music worthwhile for students to learn if it is "only about sound" and nothing more? Why are students better off for having developed an analytical, objectivist understanding of musical form as opposed to alternatives ways of understanding music? How do music teachers teach for understanding within existing contextual constraints in schools, and how can they pose alternative options and solutions for learning music in the school context? Music teachers must learn ways to negotiate with and educate colleagues and parents about music as much as youngsters.

It is doubtful that one music methods course will provide the kinds of skills and support that beginning classroom teachers need to teach music for understanding among all the other elementary subjects in the curriculum they must teach. Learning more than how to play records, rhythm instruments, and songflutes or uncritically using commercial textbooks would be a start. For example, commercial materials typically intended for student use should be designed to educate the classroom teacher as well. Teachers' understanding of school subjects and associated methods should include understanding subjects in sociopolitical and historical context, their disciplinary roots and current debates, and in the case of the arts, their epistemological and aesthetic dimensions through direct encounters focused on these particular dimensions and experiences. For example, the rich activities for youngsters described by experts in this study could be just as provocative in teacher education classes (student composition, improvisation, analysis, etc.).

There may be more fruitful ways in which classroom teachers and specialists might collaborate in an effort to teach music for understanding.

For example, well-designed listening experiences and extended assignments that require small-group and independent work could be co-developed for the regular classroom, beginning with an experimental unit or two.

Finally, teacher preparation and staff development for music specialists and classroom teachers might better use the particular interests and talents of the teachers as a starting point for innovative planning and teaching. For example, T2's love and depth of understanding of opera may have greatly influenced his/her skills in developing a coherent and elaborate unit of study for students. Other teachers or parents may know a lot about something in particular--Mozart, Gregorian chants, big bands, 60's protest music, jazz, rhythm and blues, or how to play the hammered dulcimer. Artist-in-residence programs could be reconceived to include staff development and collaborative planning prior to artists' working directly with students. P3 reminded us that learning in music is a kind of oral transmission of our indigenous culture, like language. Thus, sharing these particular interests in a community context would not only be appropriate in a music program but an authentic musical activity for teachers, learners, artists, and audiences.

Another issue which emerges from this study relates specifically to content selection and organization, whether this is determined by music specialists, music textbook authors, district curriculum guidelines, or classroom teachers. While music may be complex and embody multiple features and characteristics, we run the risk of a redundant and repetitious curriculum by grade level if we do not give more attention to content selection and the vertical articulation of the music curriculum. While the selection of musical literature can appear to be representative, some musical styles and cultures may easily be omitted if selection is not monitored more carefully by teachers. For example, in a critique of elementary textbook series in the arts, it was found that selections were biased toward white, male, Western culture despite appearances of social equity and representativeness (May, Lantz, & Rohr, 1990).

This thorny aspect of content selection is easily ignored if the primary interest driving selection is formalistic--or represents only an "objective" theoretical orientation to the arts, skirting social and political issues that contextualize not only the musical works but also those who created the works and those who make curriculum decisions about inclusion, exclusion, and emphasis. Because most publishers and educators strive to be representative and inclusive in the cultural content they select and present, they also risk a "parade of cultures" problem, just like the "parade of facts" problem in social studies or other subject-area materials. Students hardly come to understand much of anything in depth about different cultures and their music. Given this "cultural waterfront" approach to musical literature and our willy-nilly methods of selecting and organizing this material (mere exposure being our primary criterion), we may even perpetuate students' stereotypical thinking about other cultures and musical styles as well as their own. We can hide behind this thorny problem of selection by claiming that we are teaching musical concepts, elements, or sound--and nothing more.

Next, there is the risk of redundancy in the presentation of musical concepts through the grades when experts argue that any single piece of music contains all the elements working together in some fashion. While this may be true, developing these ideas toward increasing complexity may be more difficult for many teachers and curriculum developers than anticipated. Having to focus on building a representative repertoire of musical literature may, by default, result in a narrow formalistic focus on music elements (not concepts) through the grades. One could argue that since so little time is allocated to music in the school curriculum, repetition is more desirable and defensible than not. However, what may get emphasized as concepts through the grades may be the most obvious features of music--pitch and rhythm--with little attention or time left for exploring music's expressive qualities and contexts or the ways in which all the elements work dynamically together for the wide-awake percipient who has developed skills in locating, creating, and appreciating subtlety and complexity. Sometimes, it seems that in music, learning part songs and how to play increasingly difficult instruments becomes a limp substitute for intellectual growth and cognitive complexity.

One promising theme in the experts' accounts of developing students' musical understanding is their attention to student discourse, small-group work, and diverse activities which lend themselves to a variety of ways to access, monitor, assess, and act upon students' understanding beyond paper-and-pencil testing (P2 and T1) or ignoring evaluation altogether. Further, these activities and assignments engage students in metacognitive strategies and self-regulated learning, more equally distributing the power and authority to know and learn between teachers and students. The arts are noted for their omission of formal assessment at the elementary level, even though music specialists often incorporate formal testing of students' skills or engage in competitive district and state-level group performances. But, these practices rarely distinguish among individual students in terms of the grades they receive in music or suggest what individual students actually have learned, experienced, or understood as music. Much of this information may be used informally or tacitly by specialists for planning and teaching rather than for informing students about their progress or helping students better understand what they do/do not understand and appreciate in music.

Cumulatively, students will learn what "counts" and what doesn't in music from the implicit and null curriculum as much as from the explicit (Eisner, 1985). While most of the experts in this study may feel that they successfully framed music as a discipline by studying sound and nothing more, students learn and know other things about music nevertheless--particularly from the content selected and omitted, how music is taught and/or represented to them, and from their informal, out-of-school experiences. It is noticeable in this study that many of the experts avoided the question of why people engage in music in social and historical context. More attention was given to what people should attend to in music and how. The communicative and expressive features of music were all but ignored or rejected by the experts, except for T2. Style, history, appreciation, and the sociohistorical context of music construction were to be learned unproblematically by students from the study of multiple examples and their parts, by repeated exposure to works of music, and through active engagement in the reproduction of precomposed adult music and production of students' own works.

Some people, however, neither write nor engage in musical activities simply to analyze music's sounds and how elements are put together. They are more interested in the contexts and social settings in which music gets constituted, produced, and reproduced. Viewing musical knowledge as value-neutral in terms of its elements and structure is as much a kind of ideology as viewing musical knowledge as a personal or social construction. Music viewed as reflexive knowledge is of the latter ilk. Knowledge is seen to be negotiable, and the content may be legitimately criticized and argued (Eggleston, 1977). Essentially, musical knowledge, like other forms of knowledge, is dialectic and manifestly subject to political and other influences. Otherwise, how can we account for the arts' historical marginalization in public schools and universities, the teacher who must teach for understanding with 1200 students per week in 25-minute class periods, or the fact that music programs and specialists are often the first to be cut when the budget gets tight? How can we account for music as social protest or salve for the soul, music that slowly shifts in style over time, or music that appeals to different mass audiences and cultures within cultures? How do we account for the discipline's location in academe in Arts and Letters or Humanities--and not just in Music? Music is much more than sound!

Like other disciplines, music is a construction of those who participate in its making, and this construction occurs in privileged and diverse vernacular and academic contexts. Students need to encounter this kind of understanding in music as well as understanding master works, folk songs, pitch, and rhythm. While most of the experts in this study would agree with the above appeal, the interesting point is that most of them did not emphasize this sort of musical understanding when they had an opportunity to do so in these exercises.

References

Eggleston, J. (1977). The sociology of the school curriculum. Boston: Routledge & Kegan Paul.

Eisner, E. (1985). The educational imagination. New York: Macmillan.

May, W. (1989). Understanding and critical thinking in elementary art and music (Elementary Subjects Center Series No. 8). East Lansing: Michigan State University, Institute for Research on Teaching, Center for the Learning and Teaching of Elementary Subjects.

May, W. (in press). What in the world is music in *World of Music?* A critique of a commonly used textbook series (Elementary Subjects Center Series). East Lansing: Michigan State University, Institute for Research on Teaching, Center for the Learning and Teaching of Elementary Subjects.

May, W., Lantz, T., & Rohr, S. (1990). *Whose* content, context, and culture in elementary art and music textbooks? (Elementary Subjects Center Series No. 23). East Lansing: Michigan State University, Institute for Research on Teaching, Center for the Learning and Teaching of Elementary Subjects.

Meske, E., Andress, B., Pautz, M., & Willman, F. (1988). Music. [Grades K-6]. New York: Holt, Rinhart & Winston).

Music Educators National Conference. (1986). The school music program: Description and standards. Reston, VA: Author.

Prawat, R. (1989). Promoting access to knowledge, strategy, and disposition in students: A research synthesis. Review of Educational Research, 59, 1-41.

Prawat, R., Brophy, J., & McMahon, S. (1990). Experts' views on the elementary social studies curriculum: Visions of the ideal and critique of current practice (Elementary Subjects Center Series No. 14). East Lansing: Michigan State University, Institute for Research on Teaching, Center for the Learning and Teaching of Elementary Subjects.

APPENDIX

Instructions and Framing Questions Addressed by Music Experts

CURRICULUM IMPROVEMENT STUDY

Mission of the Elementary Subjects Center

The Elementary Subjects Center is one of the mission-oriented research and development centers established by the federal Office of Educational Research and Improvement. Our mission is to develop knowledge about effective teaching in five content areas (social studies, science, mathematics, literature, and the arts) at the elementary grade level, especially as it relates to the conceptual understanding and higher order thinking aspects of learning in those content areas. We seek to identify effective strategies for content area teaching that will empower students with knowledge, skills, and dispositions that they can access and use when relevant--both now and in the future, both in and out of school.

The decision to focus on this mission was prompted by several commonly made criticisms of current practice. One is that although our elementary schools seem to be doing a good job of teaching basic knowledge and skills, as indexed by scores on short answer or multiple choice tests, more emphasis may be placed on rote memorization than on meaningful understanding. A second criticism is that insufficient attention is being given to critical thinking, problem solving, and other higher order thinking aspects of content learning. Related to this is the concern that curriculum writers' continuing attempts to accommodate pressures for introduction of new content have enhanced breadth at the expense of depth. The result is that many topics are merely mentioned rather than taught in sufficient depth to develop conceptual understanding. This creates fragmentation. Instead of integrated networks of content structured around key concepts and generalizations, curricula have become clusters of disconnected content that are not organized coherently. Too many students learn only a smattering of relatively unconnected facts and ideas, most of which are soon forgotten. As a result, they end up able to access their learning in usable form only when presented with well-defined problem situations that cue them to do so (e.g., school assignments and tests).

These concerns reflect our views about learning: We believe that knowledge that is not well connected to other knowledge and past experience is transient and thus of limited value. It is generally not available for use in potentially relevant situations outside of the specific contexts in which it is acquired. Knowledge that is richly connected to other knowledge, on the other hand, is much more accessible. Because it is part of a network or structure, this type of knowledge also provides more entry points for subsequent learning, thus influencing the acquisition of new knowledge. The ability to develop relations between new and prior knowledge is facilitated when knowledge already rich in relations is part of the learner's cognitive structure. The importance of connected knowledge has been emphasized by a number of researchers; in fact, some equate connectedness with conceptual understanding.

Purpose of This Study

Our Center's research and development agenda calls for identifying ways to improve on current practice, particularly with respect to the criticisms and concerns described above. In a series of related studies, we plan to develop information about expert opinions on ideal practice, describe the variation in current practice (with emphasis on description of what occurs in classrooms where students are being empowered with accessible and usable learning), formulate and test the feasibility of guidelines for improvement, and test the effectiveness of those guidelines.

During the first phase of this research agenda, we will acquire and synthesize expert opinion about ideal practice in each of the content areas. The Curriculum Improvement Study is part of this effort. In this study we will be gathering information from two types of experts: (a) university professors recognized for their leadership in elementary level music education (and in particular, in methods of designing such education so as to empower students with accessible and usable learning) and (b) elementary grade teachers recognized for the excellence of their music teaching (and in particular, their efforts to ensure that their students are empowered with accessible and usable learning).

Your participation in this study will occur in two parts, each with several subparts. In the first part of the study, which is discussed in this paper, you will outline your ideas about the key features of ideal elementary level music curricula and illustrate these with examples. By analyzing your responses and those of the other experts included in the study, we expect to identify areas of consensus that represent the best current thinking about the ideal features of elementary music teaching.

Thoughts About Ideal Curriculum

We are interested in having you identify what you consider to be the key features of an ideal elementary grades music curriculum. Before getting to specifics, we need to clarify two aspects of our use of the term curriculum, and our intentions in designing this study. It is essential that you understand these two points.

First, although we call this the Curriculum Improvement Study and frequently use the term "curriculum" for convenience in these instructions, we give the term broad meaning. When we ask you to identify ideal features of a curriculum or to critique a curriculum, we mean to include not only the content (knowledge, skills or strategies, values, and dispositions) addressed in the curriculum's scope and sequence, but also everything else in the music program that impacts on students. Specifically, we mean to include the program's overall goals, the content selected for inclusion, the texts and other curriculum materials, the instructional methods, and the methods of evaluating student learning. In conveying your ideas about the features of ideal curricula, we want you to consider all of these features and the ways that they interrelate to produce effects on the students. You may find it helpful to mentally substitute a term such as "program," "overall approach," or "curriculum-instruction-evaluation combination" for our term "curriculum" as you read through the directions and think about your responses.

Our second clarification concerns the content aspects of ideal curricula. Please bear in mind the breadth versus depth issue and our stress on the importance of (a) empowering students with accessible networks of coherently organized and usable learning and (b) allowing for sufficient development of critical thinking, problem solving, and other higher order applications of this learning. If these goals are to be accomplished, choices must be made; that is, breadth of coverage must be limited to allow for sufficient depth. One cannot address all worthy goals or include all potentially relevant content, instructional methods, activities, assignments, or evaluation methods.

Ideal Curricula

Features of Ideal Curricula

In conveying your ideas about key features of ideal curricula, please begin by reacting to those that we have already described. We have suggested that ideal curricula will be designed to empower students with meaningfully-understood, integrated, and applicable learning that can be accessed and used when relevant in a broad range of situations in and out of school. This implies the following:

(a) balancing breadth with depth by addressing limited content but developing it sufficiently to ensure conceptual understanding;

(b) organizing the content around a limited number of powerful ideas (basic understandings and principles rooted in the disciplines);

(c) emphasizing the relationships between powerful ideas, both by contrasting along common dimensions and integrating across dimensions, so as to produce knowledge structures that are differentiated yet cohesive;

(d) providing students not only with instruction but also with opportunities to actively process information and construct meaning;

(e) fostering problem solving and other higher order thinking skills in the context of knowledge application; thus, the focus is less on thinking processes per se, and more on how to make use of previously acquired knowledge in new contexts.

Questions for you to Address Relating to Ideal Curriculum

Given the above discussion, we would like you to begin by considering two questions:

I. You may or may not agree with our suggestions about key features of ideal curricula. If you agree with everything we have said, just say so and proceed to Question 2. However, if there is anything about these ideas that you would not fully endorse, please tell us. Do you simply disagree with any of them? Do you partly agree but think that they need to be qualified or rephrased? Are there any that you see as desirable but not important enough to be considered key features? Please address these or any other points of disagreement that you may have with our suggestions about the key features of ideal curricula.

2. Beyond what has already been said in your response to the previous question, and keeping in mind our broad definition of "curricula," what other features would you identify as key features of ideal curricula? List as many such features as you believe are important enough to be considered key features, and elaborate as much as you can.

Curriculum Design Exercises

Now that you have given your ideas about the key features of ideal curricula at the K-6 level, we would like you to apply them in responding to three curriculum design exercises. For these exercises, we will present you with three important goals that are representative of what an elementary music curriculum might address, and for each goal we will ask you to respond to four questions.

Goals to be Addressed

You may find it helpful to approach these exercises as if you were a consultant assisting the staff of a local school. The school has decided to have you address three general goals that are representative of what they are trying to accomplish in their elementary level music program. The three goals that you have been asked to address are as follows:

(a) developing an understanding of how musical elements and symbols (pitch, rhythm, tone) are selected, organized, and presented by composers and musicians to communicate meaning;

(b) developing an understanding of the artistic process in composition or performance to create musical forms with expressive intent (choices, decision making, critical/creative thinking);

(c) developing a disposition to actively listen to and enjoy music for its own sake (appreciate the diversity of musical styles and forms and how composers and musicians interpret human experience and the world around them).

Assume that the school serves a student population that is racially and culturally diverse but neither notably high nor notably low in socioeconomic status, that the students are grouped heterogeneously, that class sizes average about 25, and that the teachers work with adequate but not abundant resources. Also assume that the teachers are fairly well grounded in all the subjects they teach, including music. With these constraints, you could suggest whatever strategies you wish for accomplishing the three goals, but your recommendations should be realistic (e.g., cognizant of the teacher's needs to handle the full range of subject matter areas and to address other major goals even within the music program).

Questions for You to Address for Each Goal

For each of the three goals, please answer each of the following questions:

1. What important understandings or generalizations should be developed in students if the goal is to be accomplished? You may include as many of these as you wish and describe them in as much detail as you wish, although given the focus on the most basic and powerful understandings and generalizations, we expect that you will be able to respond with brief listings of perhaps as many as ten such key understandings or generalizations once you have thought through and organized your ideas. (An example might be helpful: If the overall goal is developing an appreciation and valuing of the role that music plays in one's own life and in other people's lives, a key understanding could be that one's adaptability to different types of music is limited by culture.)

2. What sorts of relationships exist among the key understandings and generalizations you have listed? Do they all fit together into a single network? Are two or more of them linked through cause/effect, rule/example, whole/part, or other logical relationships? Do some of them form natural sequences along some common dimension? Feel free to supplement your comments about such relationships with diagrams or other illustrations if you wish to do so.

3. How would you organize these key understandings and generalizations to present them to students? Explain your rationale for this organizational plan (i.e., would it be determined by the logical relationships outlined in your answer to the previous question, or instead by other criteria such as the degree to which the key ideas refer to things that are already familiar to children at particular ages or the degree to which they can be represented in concrete terms). In general, please describe the approach that you would take in ordering or organizing these ideas in the curriculum, and explain your rationale.

4. Select one of the key understandings or generalizations you have listed and explain in detail how you would propose to develop it at the second and the fifth grade levels. (You may wish to start with the grade you are more knowledgeable about and use it as a basis for comparison with the other grade. We can help you decide which ideas on your list would be the best ones to use as the basis for this part of the exercise; we are looking for ideas that seem to be at about the right level of generality and to be appropriate for development at both the second grade and the fifth grade level).

   For each of these two grade levels, tell us in detail how you would teach the key understanding or generalization. Because it is likely that it will take more than one lesson to teach the understanding, please sketch out your overall instructional plan first, then select one prototypic lesson for more detailed treatment. For this lesson, please address the following: (a) What kind of information would you provide through teacher presentation, through having the students read, or through some other mechanism? (b) What sorts of teacher-student or student-student discourse would occur, and with what purposes in mind? (c) What activities or assignments would be included, and with what purposes? and (d) How would you evaluate student understanding or application of the key idea?

Summary of What We Would Like To Have You Do

1. State whether or not you agree with our suggestions about the key features of ideal curricula, and elaborate on any disagreements.
2. Identify any additional features of ideal curricula.
3. Respond to the following, for each of the three goals listed on pages 4 and 5.
    a. Identify the central understandings and generalizations that should be developed.
    b. Identify the relationships among these central understandings and generalizations.
    c. Organize these key understandings and generalizations as you would to present them to students.
    d. Explain this organization.
    e. Describe how one of these central understandings or generalizations would be taught at the second and at the fifth grade levels.